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Longview Pedestrian Transit Access Plan

Prepared for:

City of Longview Texas

Longview Metropolitan Planning Organization

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TABLE OF CONTENTS

| | |
|---|----|
| EXPLANATION OF TERMINOLOGY | 1 |
| 1.0 INTRODUCTION..... | 3 |
| 1.1 Purpose | 3 |
| 1.2 Goals and Objectives | 3 |
| 2.0 QUANTIFICATION OF BENEFITS | 5 |
| 2.1 Enhanced Safety for Pedestrians..... | 5 |
| 2.2 Increased Fixed Route Transit Ridership | 7 |
| 2.2.1 New Ridership, Facilitated by Improved Access to Transit..... | 7 |
| 2.2.2 Ridership Shifted from Paratransit..... | 7 |
| 2.3 Personal Economics, Health and Well-Being..... | 7 |
| 2.3.1 Personal Economics | 7 |
| 2.3.2 Personal Health and Well-Being..... | 8 |
| 3.0 EXISTING CONDITIONS ALONG THE CORRIDORS..... | 9 |
| 3.1 Sidewalk Inventory..... | 9 |
| 3.2 Origins and Destinations within Walking Distance | 9 |
| 3.3 Transit Ridership Concentrations and Potentials | 10 |
| 3.4 Pedestrian Access Conditions at Key Bus Stops | 10 |
| 4.0 EXISTING BUS SERVICE ATTRIBUTES..... | 12 |
| 4.1 Existing System Characteristics..... | 12 |
| 4.1.1 Duration..... | 12 |
| 4.1.2 Frequency..... | 12 |
| 4.1.3 Service Reliability and the Central Pulse Transfer..... | 12 |
| 4.1.4 Passenger Service Stops | 13 |
| 4.1.5 Service Coverage | 13 |
| 4.2 Bus Service By Focused Corridor..... | 13 |
| 4.2.1 Mobberly Avenue | 13 |
| 4.2.2 Cotton Street | 14 |
| 4.2.3 Fourth Street..... | 14 |
| 5.0 PUBLIC OUTREACH..... | 19 |
| 5.1 Survey Feedback..... | 19 |
| 5.2 Public Forum Feedback | 20 |
| 6.0 TRANSIT ASSESSMENT..... | 22 |
| 6.1 Ridership Propensity | 22 |

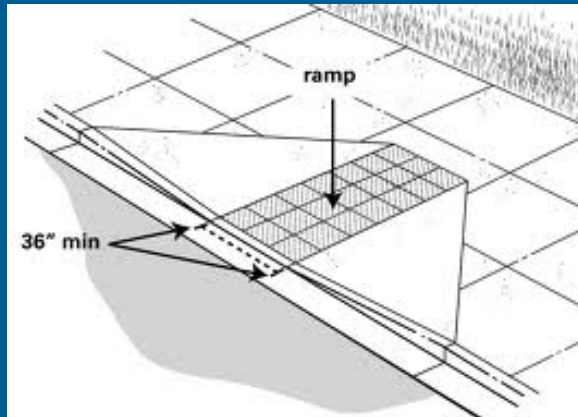
| | | |
|-------|---|----|
| 6.2 | Target Areas for Improved Connectivity and Ridership..... | 26 |
| 6.2.1 | Service Enhancement Concept..... | 26 |
| 6.2.2 | Bus Pullover Bays..... | 29 |
| 7.0 | RECOMMENDATIONS AND PROJECT LIST..... | 31 |
| 7.1 | Mobberly Avenue Corridor..... | 31 |
| 7.2 | Cotton Street Corridor..... | 32 |
| 7.3 | Fourth Street Corridor | 32 |
| 7.4 | Other Improvements to Existing Facilities..... | 47 |
| 7.5 | Prioritization of the Project List..... | 47 |
| 7.5.1 | Economic Benefit and Feedback from the Public | 48 |
| 7.5.2 | Capital Cost..... | 48 |
| 7.5.3 | Ease of Implementation..... | 48 |
| 7.5.4 | Safety..... | 48 |
| 7.5.5 | Final Ranking of Proposed Improvements..... | 49 |
| 8.0 | ENVIRONMENTAL SCAN | 52 |
| 8.1 | Sites with Recognized Environmental Conditions | 52 |
| 8.2 | Coordination with other Agencies..... | 53 |
| 9.0 | FINANCIAL IMPLEMENTATION STRATEGY..... | 54 |
| 9.1 | Local Funding Resources..... | 54 |
| 9.2 | Non-Local Funding Resources..... | 54 |
| 9.2.1 | Prime Funding Mechanisms..... | 55 |
| 9.2.2 | Other Available Programs with Limited Resources..... | 56 |
| 9.3 | Matrix of Potential Funding Resources..... | 57 |
| 9.3.1 | Combination of Projects to Seek Funding..... | 59 |

APPENDIX

- A. Existing Conditions Field Assessment
- B. Public Involvement
- C. Proposed Improvements and Related Cost Estimates
- D. Environmental Scan Documentation

EXPLANATION OF TERMINOLOGY

The following table provides brief explanations of the proposed improvements included in this report.



CURB RAMPS

A curb ramp is a solid ramp graded from a sidewalk elevation to a roadway surface. Its intent is to provide equal access to persons with disabilities. Maximum slope and width requirements are defined by Title II of the Americans with Disabilities Act (ADA). State and local governments are required to meet these standards.



PEDESTRIAN (SIGNAL) HEADS

Pedestrian heads are signal heads specifically directed toward pedestrians at a roadway intersection. The signal heads contain the WALKING PERSON and UPRAISED HAND symbols. The indicators let pedestrians know when it's safe and appropriate for them to cross the street.



CROSSWALKS

Crosswalks are at roadway intersections and are designated as the space where pedestrians can cross. These crossings are easily recognizable by their wide, white striping.



PEDESTRIAN SIGNAL (HAWK PEDESTRIAN ACTIVATED SIGNAL)

A pedestrian signal refers to a traffic signal designed specifically to stop vehicular traffic and allow pedestrians an opportunity to cross the street. Also known as a “HAWK (or **H**igh-Intensity **A**ctivated Cross**W**alk) Pedestrian Signal,” these signals are only active when a pedestrian pushes the crosswalk button. It provides a way to increase safety for pedestrians and bicyclists while reducing the delay for vehicles.

The HAWK remains DARK for traffic unless a pedestrian activates the push-button. When a pedestrian presses the button, approaching drivers will see a FLASHING YELLOW signal for a few seconds, indicating that the signal has been activated. The flashing yellow is followed by a SOLID YELLOW signal, indicating that motorists should reduce speed and be prepared to stop. The solid yellow is followed by double SOLID RED signals, requiring drivers to stop. At this time pedestrians may cross the intersection. The double solid red signals are followed by double FLASHING RED signals. The signal will then go dark until activated again by a pedestrian.

1.0 INTRODUCTION

For over 10 years, Longview Transit has provided public transit service to the City of Longview. What began as a grassroots movement to bring bus service back to the City in the late 1990s, has grown into an efficient transit network. Today, the department includes six fixed-route bus routes within the City and paratransit services. At its center is the City's Multimodal Transportation Center that connects users to Amtrak and Greyhound for trips outside of East Texas.

Longview Transit has enjoyed steady ridership growth since opening its doors in 2003. The department works diligently to ensure its riders access to buses with safe waiting areas along its routes. In recent years, the department has placed a high importance on the installation and maintenance of bus shelters and benches. As a result, a record number of shelters have been installed and a successful public-private partnership for maintaining shelters was created.

Now, key leaders are focused on improving the riders' pathways to the bus routes. The lack of pedestrian features can hinder the walking trips to and from the bus routes. To evaluate the pedestrian access and identify areas of improvement, the City of Longview contracted with Freese and Nichols, Inc. (FNI). This report focused on pedestrian access to the existing fixed route bus services along three corridors:

- Mobberly Avenue, from the Multimodal Center on Pacific Avenue to High Street
- Cotton Street, from the Multimodal Center on Pacific Avenue to Loop 281 (Lear Park)
- Fourth Street, from the Multimodal Center on Pacific Avenue to Hawkins Parkway

1.1 PURPOSE

The Pedestrian Transit Access Plan focuses on identifying potential capital improvements along the focus corridors that will (1) connect current land uses with transit stops; (2) connect market segments, such as LeTourneau University, retail centers, medical facilities and the Lear Park complex, to the multimodal complex; (3) and create improved, safe, ADA-compliant, and attractive passenger access.

1.2 GOALS AND OBJECTIVES

The goal of the plan is to identify the barriers that exist for pedestrians between the origins and destinations along the transit routes. Examples of barriers may include missing links of sidewalk between residential areas and the transit routes or pedestrian signals at high volume intersections. Simply put, barriers are existing conditions that hinder or prevent pedestrians, within a reasonable walking distance, from accessing transit services. Once identified, this plan will formulate strategies to address the barriers, prioritize the work needed and develop implementation strategies based on available funding sources.

To this end, the plan has the following objectives:

- Develop and maintain an inventory of pedestrian and bicycle facilities in the City.
- Identify a list of sidewalk and trail facilities that facilitate pedestrian and bicycle access to the City's transit services.
- Prioritize the identified list of improvements based on established evaluation criteria and ranking methodology.
- Identify potential funding resources to implement the needed pedestrian and bicyclist improvements.

2.0 QUANTIFICATION OF BENEFITS

Pedestrian mobility is an important element to all forms of transportation, including walking to and from public transit. The widespread absence of pedestrian accommodations, particularly sidewalks, is well known and agencies at all levels of government are recognizing the need to improve conditions. Accommodations for pedestrians and bicyclists along existing roads have wide-range impacts on whether public transportation services are used. In addition, walking is frequently not a choice, but a pedestrian's only option of mobility. With the almost exclusive reliance on the automobile for decades, pedestrian accommodations were not given a high priority. Sidewalks were not included on many arterial, collector, or even local roads. These and other factors resulted in lack of pedestrian spaces on a large portion of the road networks. In cases where sidewalks are present, the segments are often not connected, leaving a fragmented sidewalk network for pedestrians to navigate.

The demand for constructing missing sidewalks often exceeds available funding. Therefore, it is important for agencies to demonstrate, and quantify where practical, the benefits of sidewalk retrofit projects. Traditionally, benefits associated with highway-related improvements are quantified through a benefit-cost analysis. This approach is not appropriate to evaluate the effectiveness of pedestrian improvements, particularly when missing sidewalks is the prevailing issue. The absence of sidewalks, in most cases, results in unsafe walking conditions and people, if able, avoid exposure to a potentially unsafe environment. This has limited the number of before and after studies conducted on pedestrian engineering treatments; therefore, leaving transportation agencies without a consistent, established methodology to define the benefits of retrofitted sidewalks.

Instead transportation agencies have defined a variety of benefit categories associated with the provision of sidewalks and enhanced roadway crossings. Three categories are considered in this report: (1) enhanced safety for pedestrians, (2) increased ridership on the fixed route bus service, and (3) the value that personal mobility adds to a rider's personal economics, health and well-being.

2.1 ENHANCED SAFETY FOR PEDESTRIANS

Sidewalks and enhanced street crossings can reduce the potential for serious motor vehicle crashes with pedestrians by keeping the pedestrians out of the street and controlling driver behaviors at the street crossings. National statistics, maintained by the Federal Highway Administration, indicate an approximate social value to the various types of crashes as follows:

- \$6.2 million per fatality (AIS Level 6 – Unsurvivable) (2011 value)
- \$651,000 for incapacitating injuries (AIS Level 3 – Serious) (2011 value)
- \$18,600 for non-incapacitating and possible injury values (AIS Level 1) (2011 value)

The following are estimates of the generalized benefits of sidewalks and enhanced street crossings, assuming various net improvements in exposure to crashes with motor vehicles.

- **HAWK Pedestrian Signals** – The purpose of a HAWK beacon is to allow protected pedestrian crossings, while stopping road traffic only as needed. Research has shown motorists' compliance with the HAWK beacon at up to 97%, higher than with traditional un-signalized crossings. Considering the potential severity of a motor vehicle hitting a pedestrian crossing the street and estimating that at least one unsurvivable crash could be avoided by providing a HAWK signal within a 20-year life of the signal, that HAWK signal could be assigned a benefits value of about \$6.2 million. At an average implementation cost of about \$200,000, this treatment would have a safety benefit-cost ratio of about 30:1.
- **Sidewalks and Ramps** – The extent to which an individual would walk in the grass or dirt, versus on the actual roadway pavement, depends upon the roadside versus roadway conditions and the perceived safety difference between the two. Slope and width constraints put many pedestrians into the street or deter them from walking at all. For mobility impaired pedestrians, a sidewalk without ramp access can sometimes be like not having a sidewalk at all. Considering there are existing pedestrian volumes and at least one incapacitating injury could be avoided by providing a segment of sidewalk with ramps within a 20-year life of the sidewalk pavement, that segment of sidewalk could be assigned a benefits value of \$651,000. The value could be much higher depending upon the severity of the roadway traffic conditions. At an average implementation cost of about \$30,000, this treatment would have a safety benefit-cost ratio of about 20:1.
- **Crosswalks and Other Minor Improvements** – The marking of crosswalks, placement of signage, flashing bacons, and other minor treatments can also improve the safety for pedestrians crossing minor street segments where the risk of injury would be expected to be less serious. Considering there are existing pedestrian volumes at the proposed minor improvement location and at least one non-incapacitating injury could be avoided by providing a particular treatment within a 5-year life of the treatment, that particular treatment could be assigned a benefits value of \$18,600. At an average implementation cost of less than \$1,000, this treatment would have a safety benefit-cost ratio of about 20:1 or more.

2.2 INCREASED FIXED ROUTE TRANSIT RIDERSHIP

In addition to the safety benefits related to the pedestrian access improvements, benefits to the transit agency would exist as well.

2.2.1 New Ridership, Facilitated by Improved Access to Transit

The provision of sidewalks and ramps not only increases the safety, comfort and convenience to pedestrians, but also increases the attractiveness of using transit. Even for captive riders (those without access to personal vehicles), the improved pedestrian access to and from their origins and destinations can be expected to increase ridership activity of current riders and potentially attract new riders of transit. Considering that for every new segment of sidewalk access to transit, at least ten additional round trips per day could be generated by providing that connection, it can be estimated that the increased ridership for that one sidewalk access way could generate additional revenue of \$5,000 or more per year for the same service already provided.

2.2.2 Ridership Shifted from Paratransit

Many current users of the paratransit service do so because of the lack of accessible sidewalks to and from the fixed bus service. According to statistics published by the American Public Transportation Association (APTA), the cost to a transit agency to provide a paratransit ride is some 10 to 20 times higher than the cost of a fixed route rider. By providing a particular segment of sidewalk with access to a bus stop, Longview Transit could shift one or more passengers per week from a paratransit trip to a fixed route trip. The cost savings to the transit department may be \$50 per week or more, or over \$2,500 per year. The cost savings were conservatively defined by reviewing Longview Transit's service provider costs.

2.3 PERSONAL ECONOMICS, HEALTH AND WELL-BEING

The improvements also result in benefits to the individual transit rider.

2.3.1 Personal Economics

The enhanced pedestrian access to transit services will increase the personal mobility of those who use that particular sidewalk or crossing enhancement.

- This betterment may be realized in terms of time savings across the total trip length, facilitated by making the more direct route paved and safer. FHWA Cost and Benefit Analysis Guidelines suggest using a value of \$15.00 per hour for the value of non-business personal time. If the provision of a sidewalk or HAWK signal were to save an individual transit user just two minutes one way on their journey, the \$1.00 daily savings in personal time could add up to over \$200 per year.

- If, however, the provided access to transit allows for the elimination of some other more costly form of transportation arrangement, such as a for hire arrangement, the personal cost savings benefit could be even greater.
- Also, in a 2009 study of the relationship between walkability and real estate values, evidence shows an increase in assessed value of \$700 to \$3,000 for every one-point increase in Walk Score. A point on the 1 to 100 Walk Score scale can be gained for every key destination within a reasonable walking distance.
- The *2012 Benchmarking Report on Bicycling and Walking in the U.S.* found that bicycling and walking projects create 11-14 jobs per \$1 million spent, compared to just 7 jobs created per \$1 million spent on highway projects. It also reported that if just one out of every ten adults started a regular walking program, the U.S. could save \$5.6 billion in health care costs—enough to pay for the college tuition of one million students.

2.3.2 Personal Health and Well-Being

The facilitation of healthy walking to the bus stop by the provision of sidewalks can help with the promotion of an active lifestyle, benefiting personal health and reducing medical expenses. The enhanced safety of walking to the bus and crossing streets can reduce stress levels associated with the necessary regular and special purpose commutes.

3.0 EXISTING CONDITIONS ALONG THE CORRIDORS

The existing conditions along the three focused corridors were defined through field reconnaissance and data gathering exercises with City staff. The resulting information revealed how pedestrians are currently accessing and using transit services within the City.

Many studies have been completed to define what pedestrians consider a reasonable distance to access services. The one-quarter mile radius is widely accepted as the reasonable walking distance for most people in suburban areas. The distance is closer to a half mile radius in more urbanized settings. However, for evaluation purposes in the City of Longview, a one-quarter mile radius along the corridors was considered.

3.1 SIDEWALK INVENTORY

A sidewalk inventory was conducted to understand current pedestrian characteristics. Field reconnaissance coupled with GIS analysis was performed to assess the existing system's conditions. The City of Longview provided GIS shapefiles for the City's boundaries, street network and a partial inventory of its sidewalks. The shapefiles were imported into the project's base file and used to develop the figures and analysis associated with the project. The shapefiles created during this study for data and representation of concepts, can be readily imported back into the City's GIS database.

FNI conducted a site assessment along the streets to identify sidewalks that were missing from the current GIS shapefiles. The resulting sidewalk inventory is presented in **Appendix A**. Our observations revealed that the three focus corridors lack an extensive network of sidewalks within their right-of-ways. The highest concentration of available sidewalk is along Mobberly Avenue; however, the majority of the sidewalk is not compliant with current ADA standards.

3.2 ORIGINS AND DESTINATIONS WITHIN WALKING DISTANCE

Understanding what attractions transit users are trying to reach is an important component to improving pedestrian access. By mapping the various origins and destinations located along the focus corridors, a picture of the trips' overall goal emerges. The City of Longview provided GIS layers for the land use features including governmental buildings, parks and other civic locations. FNI supplemented the GIS information with low-income housing locations and significant apartment complexes. Information was also compiled on census data of household income, auto ownership and other indicators of the propensity to ride transit.

The three corridors offer a wide array of origins and destinations that drive transit ridership:

- Mobberly Avenue – The corridor contains a mix of residential areas and commercial businesses. The residential areas are comprised of both single- and multi-family units. The corridor is ethnically diverse and intersects several areas with low-income households. LeTourneau University is located on the route’s southern edge and is a large contributor to ridership.
- Cotton Street – The corridor passes through the City’s downtown area and offers access to several businesses, some industrial in nature. At its western point, the route passes Lear Park, a large sporting venue within the City. This park does not currently contribute a large volume of ridership. The majority of transit use along the corridor is contributed to people accessing the downtown business district.
- Fourth Street – This corridor provides riders access to many of the region’s medical facilities. Near the Multimodal Center, the route passes by the Good Shepherd Medical Center and several other medical offices. As the route extends north, it goes through a large residential area, which is comprised of mostly single-family residential development. Continuing northward, the corridor passes the Longview Regional Medical Center and a major retail area near the Loop 281 intersection.

3.3 TRANSIT RIDERSHIP CONCENTRATIONS AND POTENTIALS

Boarding information is currently compiled hourly for each route using fare-box tabulation capabilities. The available data shows ridership boarding variations aggregated by route and by hour of day, but it does not indicate stop-specific information. The time-stamped boarding information, along with driver observations, has been used over the years to locate bus shelters and benches at these higher boarding locations. Information is not collected on the alighting passengers and the locations where they depart the buses.

In discussions with Longview Transit staff, it was decided that the existing bus shelters and bench locations are indicators of high bus utilization activities. The one-quarter mile radius surrounding these stops would have a greater need for improved pedestrian transit accommodations than other locations along the routes. These indicators are sufficient to recognize areas where higher priority needs for enhancements exist.

3.4 PEDESTRIAN ACCESS CONDITIONS AT KEY BUS STOPS

Base maps focusing on a one-quarter mile radius from the existing bus stops were created to assess pedestrian access to transit. The maps highlighted existing pedestrian features and were used to identify facilities needed to enhance transit access. The maps are shown in **Appendix A**.

The safest and optimum configuration is the separation of pedestrians and vehicular traffic. However, the analysis revealed a large portion of the existing roadway network lacked sidewalks. Given the shortage of sidewalks within

public right-of-ways, a set of criteria is warranted to assess and prioritize sidewalk needs for bus stops within these corridors. Since development will occur over time, the following criteria will be considered when identifying and prioritizing transit access projects:

- Local streets with very low traffic volumes (less than 500 cars per day) can accommodate pedestrian activity without the provision of sidewalks, if necessary.
- Existing development parking lots can sometimes serve as pedestrian access ways without the addition of sidewalks.
- On many of the streets the current bus routes only provide one-direction of service, therefore this access limitation should be considered when placing new sidewalks.
- Walking along the street parallel to the bus route allows riders to spot the bus in advance and select an appropriate boarding location. However, walking along local and collector streets may provide a more comfortable setting for pedestrians versus walking along sidewalks on a higher volume arterial.
- To facilitate transit services, the construction of new walking routes should connect existing concentrations of rider activity, to the extent reasonable. Projects that provide the missing link between high-use areas should have a higher prioritization.
- Consideration to how bicyclists may access the bus service is important.

4.0 EXISTING BUS SERVICE ATTRIBUTES

In conjunction with the on-system sidewalk and trails assessment, existing transit services along the focused corridors were also evaluated for potential improvements that could facilitate walking and bicycling access to transit.

4.1 EXISTING SYSTEM CHARACTERISTICS

Longview Transit runs six fixed-route bus routes that radiate from the central transfer center at Magrill Park. Demand responsive service (i.e. paratransit service) is also provided but is not part of this study.

4.1.1 Duration

The bus service runs from 6:15 a.m. to 7:15 p.m. on Monday through Friday and 7:15 a.m. to 6:15 p.m. on Saturday, beginning and ending at Magrill Park. At the present time, bus service is not available on Sundays.

4.1.2 Frequency

Routes 1, 3, 5 and 6 operate with one-hour headways. The routes are scheduled for a 55-minute travel time with a 5-minute period for pulse transfers at Magrill Park. The pulse transfers occur at 15 minutes past every hour. On Route 2 and 4, the travel time is a 25-minute route with a 5-minute dwell at Magrill Park for transfers. This layover occurs at 15 minutes before and after every hour. Unlike the other routes where one bus is assigned full-time, Routes 2 and 4 share a bus for their operations. The routes are interlined, meaning the bus completes Route 2, stops at the park for transfers, and continues on to serve Route 4. After running Route 4, the bus returns to the park for transfers and begins again along Route 2. This approach creates what appears to be a one-hour headway for riders along each route.

4.1.3 Service Reliability and the Central Pulse Transfer

Because of the one-hour headways, the pulse transfers at the Magrill Park are essential for effective cross-town service. Note pulsed transfer operations have inherent benefits and inefficiencies:

- The scheduled 5 minutes of pulsed transfers provide slack time for the buses to synchronize at each pulse. The synchronization of the routes enhances the overall reliability of the service.
- Not all buses will be able to complete their service routes exactly between pulses. Some may have extra slack time, while some buses may barely arrive at the transfer point so that the other buses are not delayed.

- As the radial routes are extended to serve more of the community, additional slack time must be built into the routes' schedules to maintain the pulsed transfer.
- Currently, Routes 2 and 4 are interlined, shorter routes that pass through the transfer center every 30 minutes. Cross-town access would be enhanced if the system were expanded to incorporate additional short routes. This modification would allow transfers to pulse every 30 minutes.

4.1.4 Passenger Service Stops

It is the current practice of Longview Transit to pick-up and drop-off passengers at any point along the route, not only at designated stops. Bus stop signs have been placed where passengers commonly request to board or depart the buses. Bus benches and shelters are also present at the higher activity locations. Given the one-hour service headways, passengers tend to arrive at the bus stops early and wait for the bus to arrive because the consequences of missing it are significant. The amenities provided at each bus stop should reflect the wait time and conditions experienced by the riders. Routes with longer headways should provide benches and/or shelters that passengers can comfortably wait at.

4.1.5 Service Coverage

Route placement is a balancing act between providing close access to major origins/destinations and operating the route in a timely matter. A bus route is considered to provide coverage, or adequate service, to the area within a one-quarter mile walking distance of its stops. As shown in **Figure 4A, 4B, 4C and 4D**, Longview Transit provides good service coverage to the majority of the City's developed areas. However, a street with a route heading in only one direction (e.g., inbound but not outbound) can require a passenger to ride in the opposite direction from their destination for a portion of their trip, or to walk further to board a bus heading directly toward their destination.

4.2 BUS SERVICE BY FOCUSED CORRIDOR

The three study corridors are provided with various levels of transit service, ranging from partial two-way service to single direction service.

4.2.1 Mobberly Avenue

Mobberly Avenue is served by the inbound leg of Route 6 from Birdsong Street to the downtown area and by the outbound leg of Route 1 from Avalon Street southbound to Estes Parkway. The two routes overlap and provide two-way service for four blocks between Avalon Street and Birdsong Street. LeTourneau University is a major trip generator along Mobberly Street and is served by the outbound leg of Route 1. A bus shelter is provided near its

front entrance. In addition, students can access a connection to the inbound leg of Route 1 nearby at the intersection of Estes Parkway and High Street.

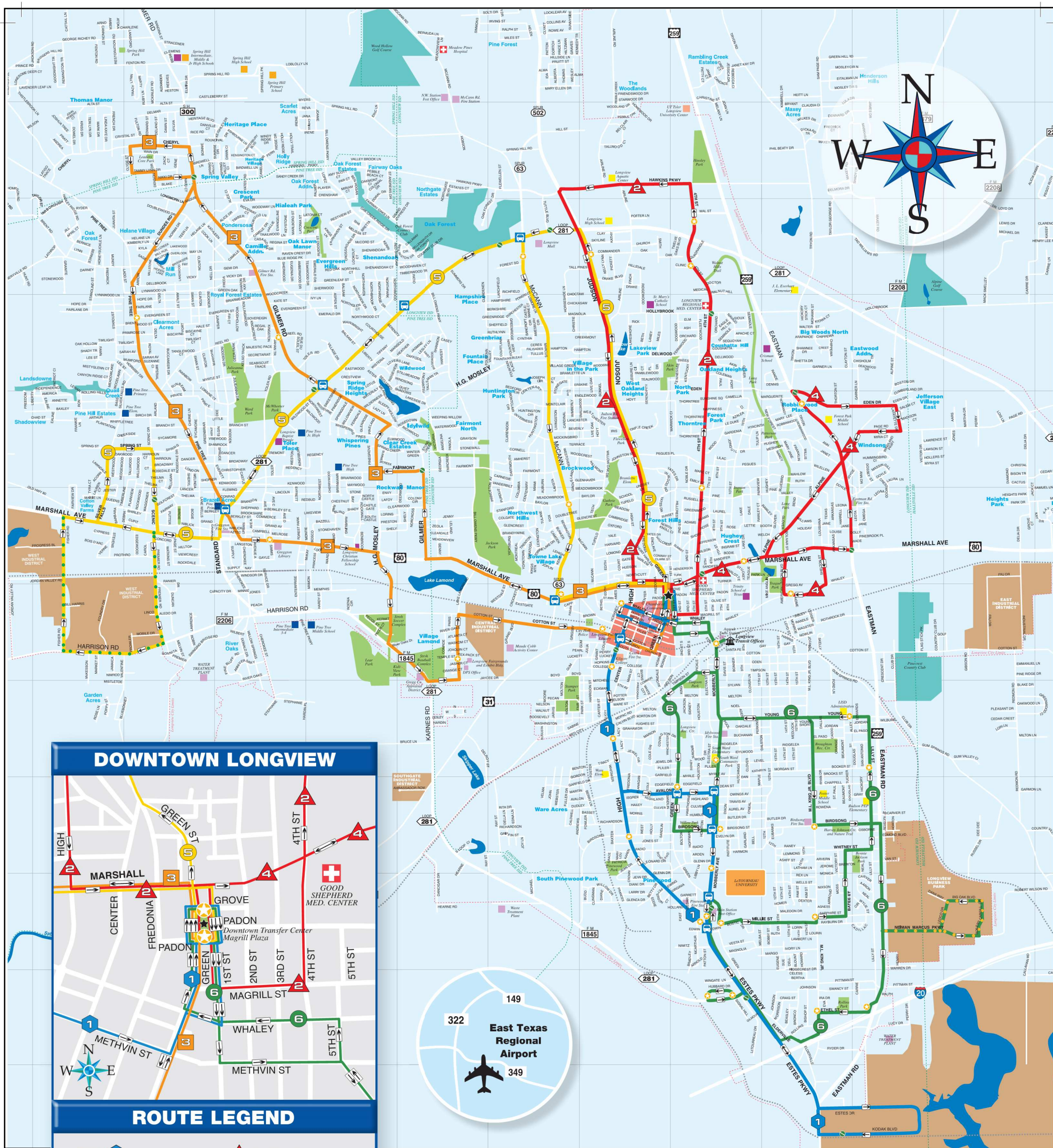
Route 1 provides five bus shelters and five benches, while Route 6 provides three bus shelters and three benches. The large number of shelters and benches is an indicator of high ridership. Most of all the shelters and benches are located within a one-quarter mile walking distance of the Mobberly Street corridor. This web of Routes 1 and 6 has evolved over time in response to input from riders, but is somewhat difficult to comprehend and expectedly cumbersome to use.

4.2.2 Cotton Street

Cotton Street is served by the inbound leg of Route 3. The outbound leg of Route 3 runs along Marshall Avenue (US 80), which parallels Cotton Street to its north. The distance between Cotton Street and Marshall Avenue (US 80) varies between one-quarter to one-half of a mile. However, the closest point between the roadways occurs at McCann Street. There is one bus shelter located along the Cotton Street corridor, near the Library, where Route 3 intersects with Route 1. The bus shelter indicates a high use location along the routes.

4.2.3 Fourth Street

Fourth Street is served by the outbound leg of Route 2. Major trip generators along the route include Good Shepherd Medical Center near downtown, Longview Regional Medical Center and the Wal-Mart Supercenter on the route's northern end near Loop 281. Existing bus shelters and/or benches are located near the Wal-Mart Supercenter and the Social Security Administration office. The added amenities indicate high-use transit activities are present. The inbound leg of Route 2 is located between one-quarter to one-half of a mile west of Fourth Street along Judson Road. Judson Road is also serviced by Route 5, resulting in over three miles of two-way bus service. The overlap benefits the Fourth Street corridor since it's within the accepted walking distance for transit access.



LongviewTransit

Bus Routes

Real East Texas
CITY OF LONGVIEW

Longview Pedestrian Access Study
Transit Line System
Figure 4A

1

Mobberly/LeTourneau University



Real East Texas
CITY OF LONGVIEW

Longview Pedestrian Access Study
Transit Line System

Figure 4B



Medical District/Longview HS



3

Pine Tree/Spring Hill



CITY OF **LONGVIEW** Real East Texas

Longview Pedestrian Access Study
Transit Line System

Figure 4D

5.0 PUBLIC OUTREACH

Public outreach is a vital part of this study. It ensures the recommendations for connectivity and accessibility reflect the thoughts of key stakeholders and transit users. Feedback and comments were secured through two methods: first with a series of surveys conducted the first week of November, followed by an open public forum hosted at the public library during the same time period.

5.1 SURVEY FEEDBACK

Surveys aimed at capturing the public's perception of the pedestrian access to transit were conducted the week of November 4-8, 2013. The surveys were designed to gather feedback from three groups: current transit users, potential riders not currently on transit services, and current paratransit users that could migrate to the fixed routes with access improvements. Completed surveys can be found in **Appendix B**.

Bus drivers and volunteers distributed and administered the surveys to current riders on board the buses. Surveys were also posted online at the Longview Transit's website to capture feedback from non-riders. To secure feedback from paratransit users, transit staff reached out to riders and garnered input about access to the fixed route system.

The following bullets summarize the obtained feedback:

- Completion of the missing sidewalk and intersection connections along the Mobberly Avenue corridor would improve access to transit. Sidewalks along Young Street leading to Mobberly Avenue would be an additional benefit.
- The lack of a sidewalk connection along East Birdsong Street between South Green Street and Mobberly Avenue was identified as a barrier for several pedestrians.
- An increase in stop density along Cotton Street would improve the route's visibility and presence along the corridor.
- Several pedestrians pointed out the importance of sidewalk and intersection safety enhancements between the Public Library's bus stop on Cotton Street and Kilgore College on South High Street.
- A few surveys noted the need for a sidewalk along Lake Lamond Road. The Texas Department of Public Safety Office was noted as a final destination point.
- Both fixed-route and paratransit users desire enhanced sidewalk connections to Good Shepherd Medical Center and the surrounding medical offices.

- Several riders indicated they would like to see two-way service along Fourth Street, as well as an extension of service to the Target shopping center east of US Highway 259.

In addition to the feedback related to the focused corridors, several general upgrades and needs outside the study's boundaries were identified. The following bullets summarize these observations:

- Upgrades to the transit buses are needed to make them more accessible and user-friendly for people with disabilities. Suggestions included features such as wheelchair lifts, lower steps for boarding and verbal and visual indicators of upcoming stops for the blind and hearing impaired users.
- The installation of more handicap accessible bus shelters.
- Expand the hours of operation to include more evening and weekend times that will better serve users commuting to work outside the existing service times.
- The extension of transit service to the communities of Lakeport and Springhill.
- Improved sidewalk connections along Silverfalls Road and Gilmer Road.

5.2 PUBLIC FORUM FEEDBACK

A public forum was hosted on Thursday, November 7, 2013 to reach individuals who did not have an opportunity to share their feedback through the surveys. The public was presented with the overall project approach and schedule. The public was asked to provide their input through a series of exercises.

Several key concepts and areas were discussed:

- Concern was shared for the safety of pedestrians crossing the focused corridors. The concern was greater at unsignalized locations, such as the intersection of Fourth Street and Clinic Drive. At this location, riders exit the bus on the east side of Fourth Street and cross the street to access the Social Security Administration Office along Clinic Drive. The concept of utilizing a HAWK pedestrian activated signal at such locations was discussed and gained strong support from participants.
- Participants echoed the need for more accessibility to Good Shepherd Medical Center and the surrounding medical offices. However, the discussion identified that stopping along Fourth Street for boarding / alighting operations not only created more traffic congestion, but also an unsafe condition for pedestrians. A suggestion to shift the transit route from Fourth Street to Sixth Street, just north of the Multimodal Center, gained support. The route change has two benefits: it continues service to the

hospital and expands it to Longview's Housing and Community Development facility, located near the corner of Sixth Street and Fourth Street.

- A concept for reorganizing the system's routes was also presented. The reorganization is aimed towards providing two-way transit service along several of the City's major corridors without increasing its bus fleet. The concept also converts some of the existing 60-minute routes to 30-minute headways. The concept was well-received by participants.
- Participants also viewed the proposed sidewalk improvements identified through the transit assessment phase of this study. Participants verified the need and placement of the sidewalks at several locations. Along Mobberly Avenue, the limits of the sidewalk placement were expanded to include areas viewed as higher use locations based on personal observations.

6.0 TRANSIT ASSESSMENT

In addition to enhancing pedestrian access to the bus service, the routes were reviewed for potential enhancements that would provide more accessible service to and from user origins and destinations.

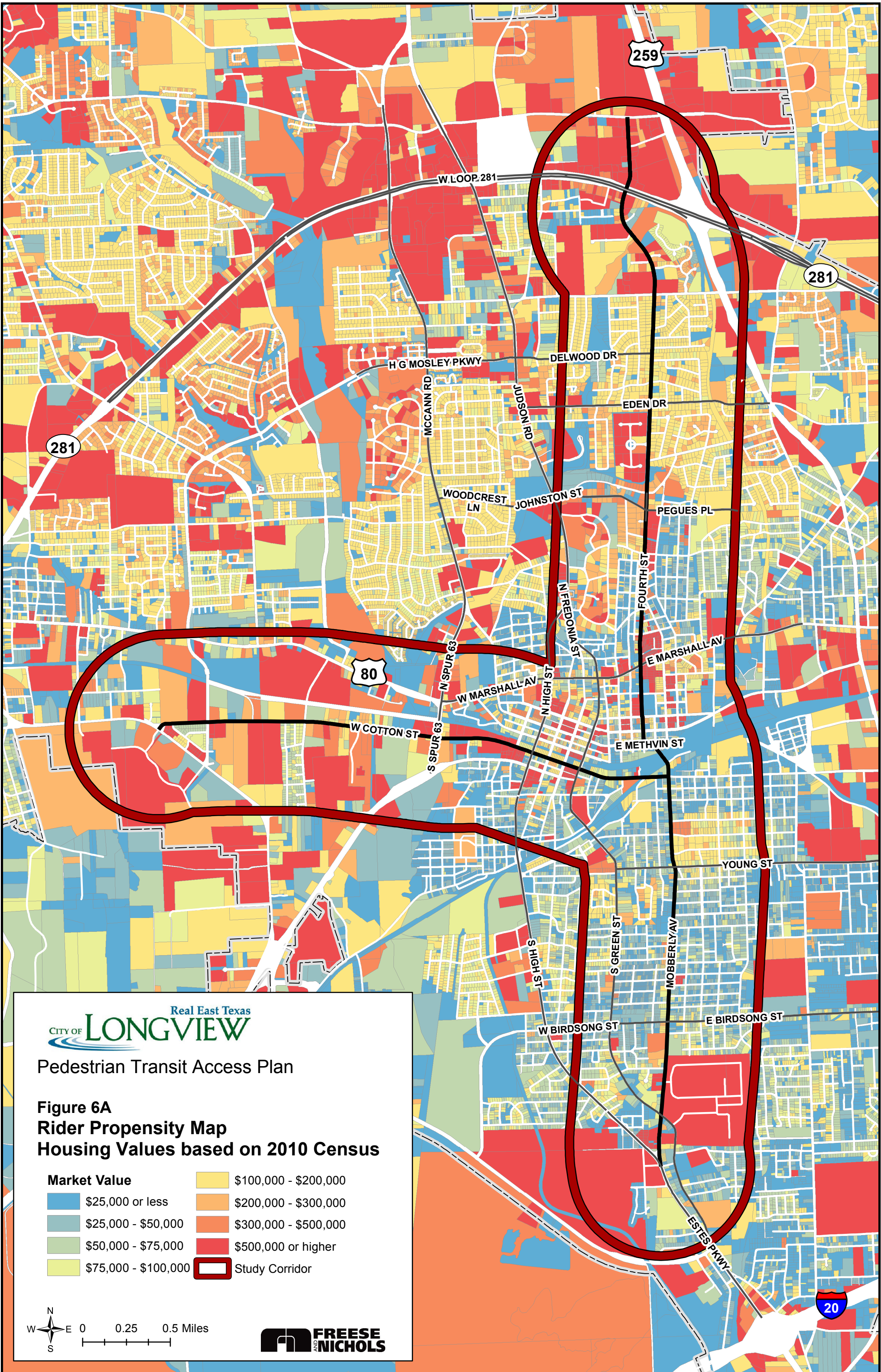
6.1 RIDERSHIP PROPENSITY

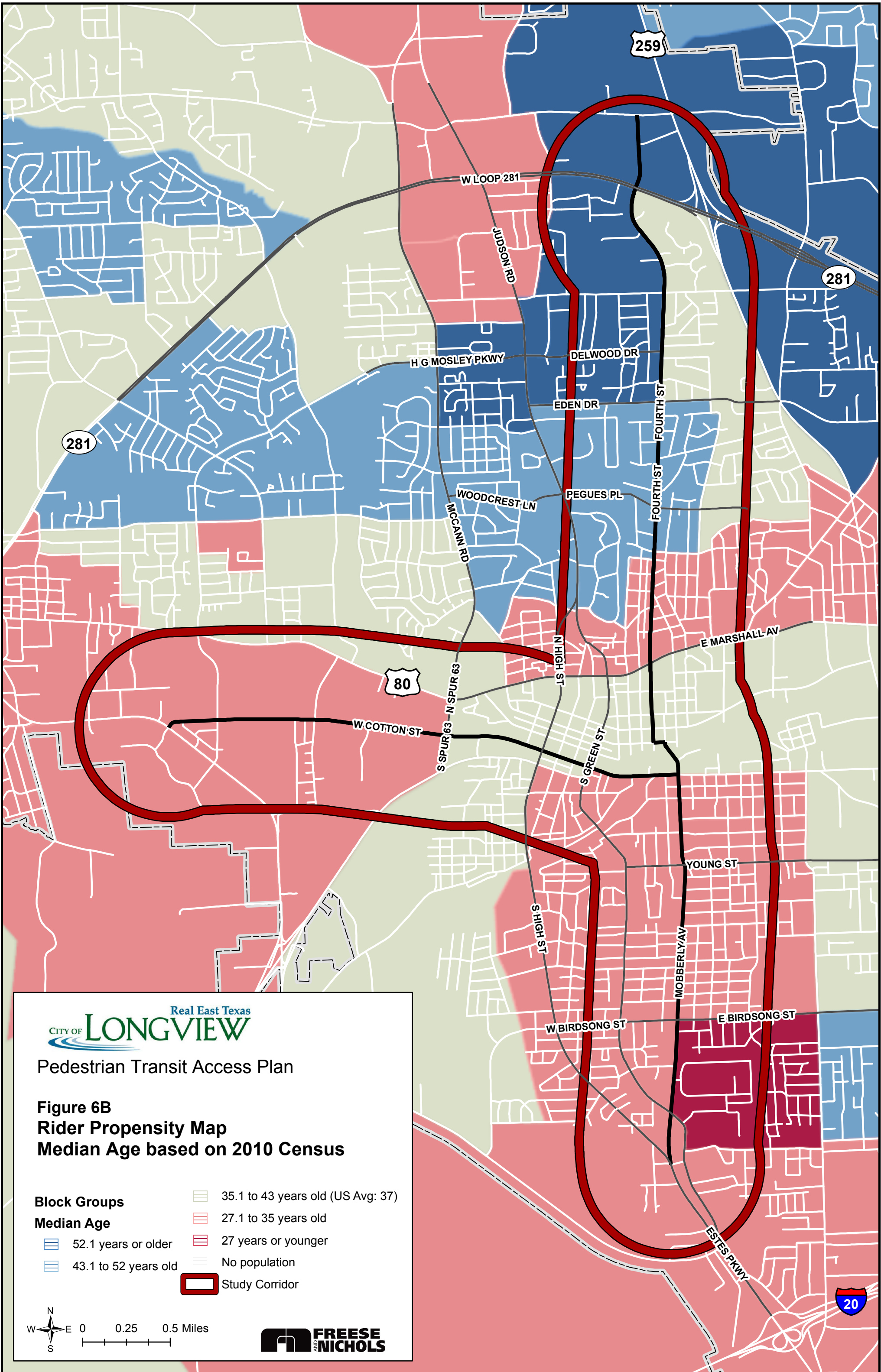
The market for transit services can be estimated using geographic information systems (GIS), local information, and census data. These factors are used to identify locations of groups who are more likely to be transit users. Groups that are generally more likely transit users include:

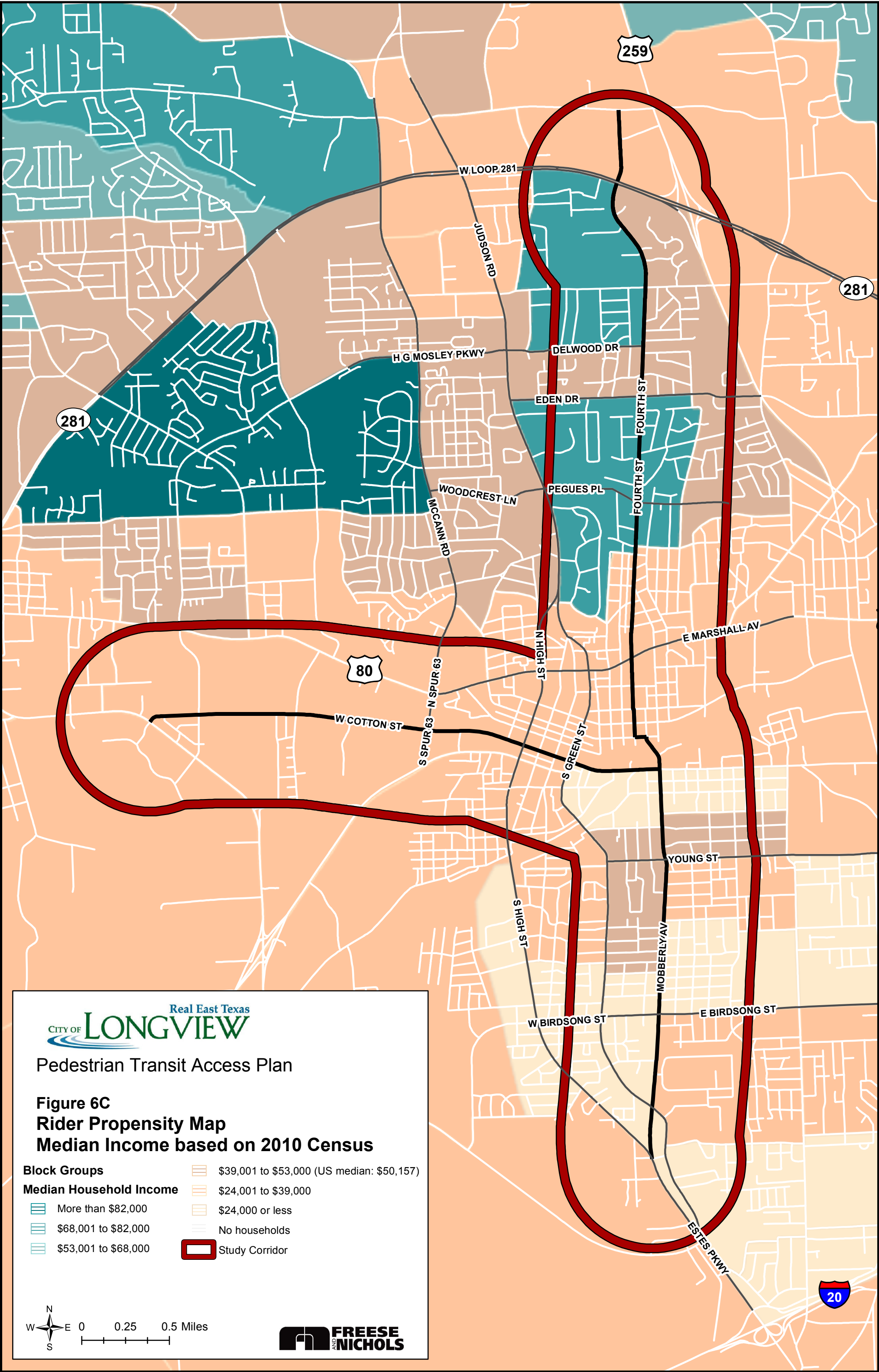
- Low auto ownership households
- Low income households
- Households with lower valued housing
- Households within greater population densities
- Persons working in greater employment densities

This study analyzed the available GIS and 2010 Census data to identify ridership propensity based on three factors: average housing values, the median age of residents and the median income per household. **Figures 6A, 6B and 6C** show each measure as they occur along the focused corridors. The average housing values and the median income per household are similar indicators. Households with lower incomes tend to live in housing with lower values. Studies have showed both groups are more likely to utilize public transit services as a mode of mobility. The median age of residents shows a second level of potential ridership. As people age their dependency on others increase, including their need for transportation assistance. By identifying the areas where higher density of aging residents overlap with lower average housing values and/or median income per household, one could tailor the service amenities to better serve and attract new ridership.

The mapping of these attributes created a comparison between the areas of potential demand for transit services and the existing service coverage. **Figures 6A and 6C** show the Mobberly Avenue corridor has the highest propensity for ridership. Therefore this corridor should be a focus for targeted improvements including service enhancements and stop amenities. **Figure 6B** indicates the highest density of aging residents live along the Fourth Street corridor. When cross-referenced to **Figures 6A and 6C**, the area between Delwood Drive and Eden Drive offers an aging population that may take advantage of public transit services.







Real East Texas

CITY OF LONGVIEW

Pedestrian Transit Access Plan

Figure 6C
Rider Propensity Map
Median Income based on 2010 Census

Block Groups

Median Household Income

More than \$82,000

\$68,001 to \$82,000

\$53,001 to \$68,000

\$39,001 to \$53,000 (US median: \$50,157)

\$24,001 to \$39,000

\$24,000 or less

No households

Study Corridor

N

W

E

S

0

0.25

0.5 Miles

FREES

NICHOLS

6.2 TARGET AREAS FOR IMPROVED CONNECTIVITY AND RIDERSHIP

In the *2011 Boarding and Alighting Survey*, conducted by Longview Transit, participants were asked what barriers riders experienced while using transit. A significant number of responses indicated the lack of sidewalks. This barrier also extends to mobility-impaired individuals. Without adequate sidewalks and ADA-compliant ramps, many potential fixed route users are forced onto the department's paratransit service. The installation of adequate sidewalks, ramps and crosswalks could reduce the demand on paratransit by transferring some users on the fixed route system. Given these facts, the need for sidewalks, ADA-compliant ramps and protected pedestrian crossings are a focus of the recommendations of this report.

The one-hour headways, coupled with the one-way service on many of the routes, limits the service's attractiveness to the transit-dependent riders in the community. By decreasing the headways, ridership among those with access to a vehicle for personal mobility may increase. Enhancements to reduce headways and provide two-way service along the City's major corridors were explored. The resulting concept utilizes the department's available fleet and provides 30-minute headway coverage to the core area inside Loop 281.

6.2.1 Service Enhancement Concept

The interlined operation of Routes 2 and 4 provided the inspiration for a concept to enhance the existing route structure and make the fixed route bus service more accessible and attractive to both transit-dependent and choice riders. The basic concept is to convert the existing configuration into a set of eight interlined 30-minute routes serving the City's core areas plus two one-hour peripheral routes serving the edge areas. The new route structure would require the same six buses as currently used on the existing routes. This concept is depicted in **Figure 6D** and described below. Detailed enhancement maps by route can be found in **Appendix C**. *Before implementing this service concept, additional detailed analysis is essential to determine if Longview Transit has or could obtain the resources required to operate the concept. Additional buses and/or personnel may be necessary.*

- BUS #1 – Existing Routes 2 and 4 stay essentially the same, two 30-minute routes interlined on a one-hour headway and served by one bus, although their interlining may shift to other pairings. In **Figure 6D**, these are Routes 2B and 4B in the Reconfigured System.
- BUS #2 – Existing Routes 3 and 5 would be truncated at Loop 281 and sent back in to the Magrill Transit Center, creating 30-minute round trip routes, including time for the pulse transfer. In **Figure 6D**, these are Routes 3A and 3B in the Reconfigured System. One bus could cover two routes, though the preferred pairing for their interlining is yet to be determined.

- BUS #3 - Truncating and interlining existing Routes 3 and 5 leaves one bus to serve the remnants of the truncated service area along and north of Loop 281. With a one-hour headway, the routing of new Route 5X would bring riders in from the remote service areas and drop passengers at transfer points near the ends of Routes 2B, 3A, 3B and 4B. Route 5X could be scheduled to allow passengers to be dropped off before Routes 2B, 3A, and 3B reach the transfer points, allowing riders from Route 5X to access the other routes. After dropping passengers at the transfer points, Route 5X would circulate to serve a new area east of Route 2B, but return to Loop 281 and cross Routes 2B, 3A, and 3B again. The second crossover would allow passengers dropped off by Route 2B, 3A and 3B to board Route 5X.

- BUS #4 – In a similar fashion described for BUS #2, Routes 1 and 6 would be truncated near LeTourneau University into two 30-minute routes. The new routes would cross each other and create a secondary transfer hub location, optimally at one of the existing bus shelters, before circling back to the Transit Center. In **Figure 6D**, these are Routes 1A and 1B in the Reconfigured System. One bus could cover the two routes, though the preferred pairing for their interlining is yet to be determined.

- BUS #5 - In a similar fashion described for BUS #3, a one-hour route would be provided and would extend from a secondary transfer hub to Kodak Boulevard. The new route would cover the service area vacated by truncating existing Routes 1 and 6.

- BUS #6 – By reconfiguring the routes to create 30-minute routes near the City's core and one-hour circulating routes at the periphery, one bus remains to be allocated into service. For this concept, two additional 30-minute routes are proposed – one located to the north and the other to the south of the central transfer point. The routes are identified as Routes 2A and 4B in **Figure 6D**. Route 2A fills in some of the service area that was trimmed from the existing Route 6. Route 4B provides the missing opposite direction of bus service along Fourth Street and McCann Road.

The bus service provided by any one bus will still operate on a one-hour headway, but the core eight routes (four buses) will pulse transfer every 30 minutes. Interlining of the routes, in certain combinations, will allow some passengers to stay on the same bus to make cross-town trips. Also depending on the interlined pairing of the routes, the core area inside Loop 281 will appear to have 30-minute headway coverage, though not all within a quarter mile walking distance.



Pedestrian Transit Access Plan

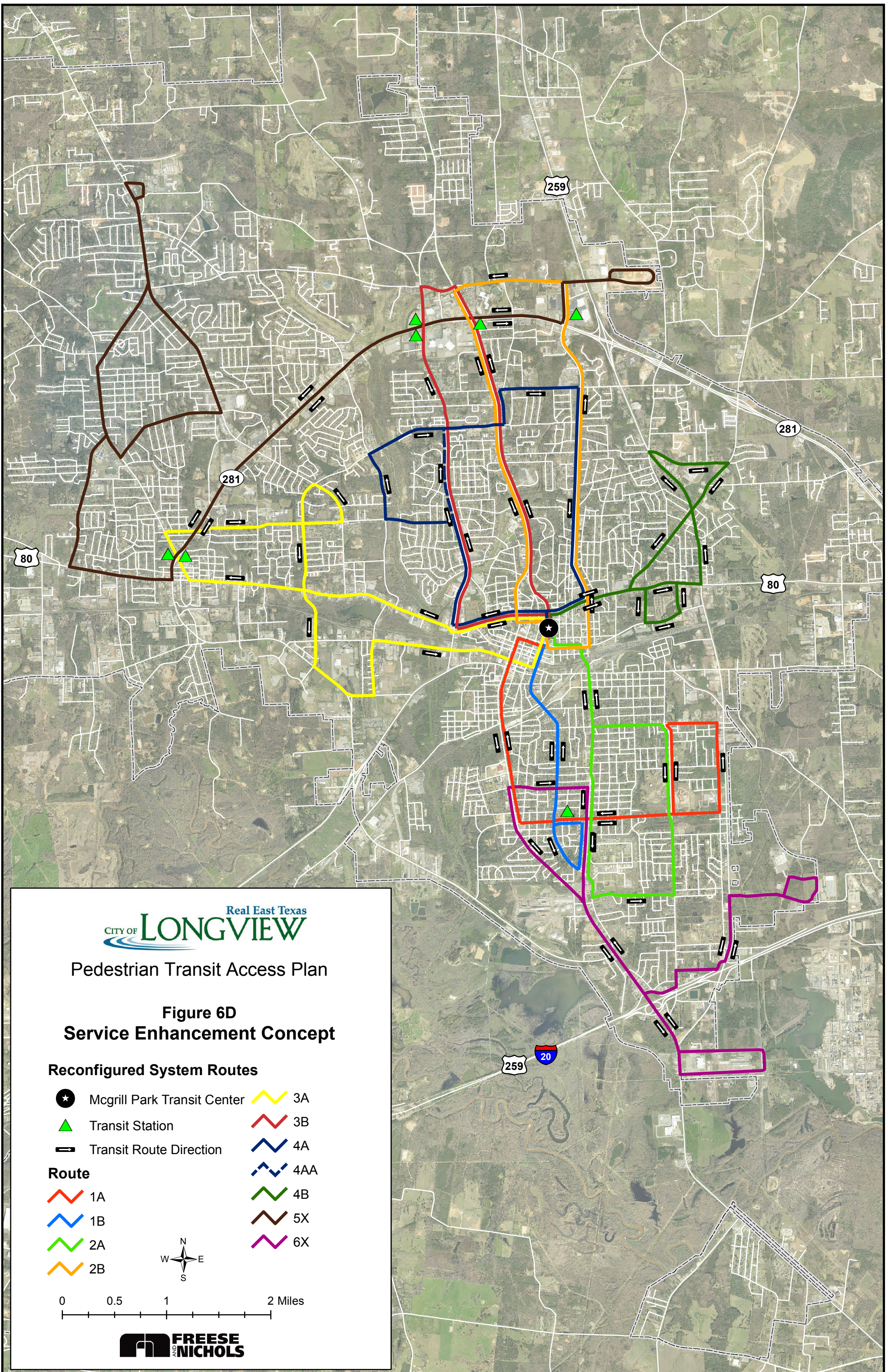
Figure 6D
Service Enhancement Concept

Reconfigured System Routes

- Mcgrill Park Transit Center
 - Transit Station
 - Transit Route Direction
- | | |
|----|-----|
| 1A | 4A |
| 1B | 4AA |
| 2A | 4B |
| 2B | 5X |
| | 6X |
| 3A | |
| 3B | |



0 0.5 1 2 Miles



6.2.2 Bus Pullover Bays

A bus pullover – sometimes referred to as a bus turnout, bus pullout, bus bay or off-line bus stop – is an added width of pavement adjacent to the travel lane that allows buses to exit traffic during boarding and alighting operations. Bus pullover bays can be provided at mid-block or at intersection locations. Pullovers located before an intersection are considered near-side pullovers and when placed on the departing leg of the intersection, they are considered far-side pullovers. Far-side pullovers are preferred. On near-side bays, buses have trouble getting back into traffic and through an intersection. These pullovers also create confusion for right turning vehicles.

In general, bus pullovers have both positive and negative attributes as shown in **Table 1**.

Table 1 • Comparison of Attributes for Bus Pullovers

| Positive Attributes | Negative Attributes |
|--|--|
| Reduces delay to the general traffic flow | Buses can experience delay re-entering traffic |
| Reduces potential for rear end collisions with bus | Buses are exposed to re-entry collisions |
| Allows bus to dwell as long as needed | Can be expensive depending on ROW needs |

The inclusion of bus pullover bays as a recommendation of this report was investigated to follow-up on feedback received from the City of Longview’s Public Transportation Advisory Committee (PTAC). Though not directly related to pedestrian access, the use of bus pullover bays is important under certain traffic conditions. The following guidelines are offered as implementation standards:

- Bus turnouts can be an effective strategy for bus routes along streets with only one travel lane in each direction, as right-of-way permits.
- Generally, bus bays are needed less on streets with two or more travel lanes in each direction, especially if a center turn lane or median is provided.

Bus pullover bays are increasingly beneficial as the following factors become significant:

- Traffic congestion on the roadway creates Level of Service (LOS) E, or worse, near the bus stop for more than 2 hours per day
- Traffic speeds near the bus stop are over 40 miles per hour
- Bus frequency along the corridor is greater than 2 buses per hour, especially during periods of poor LOS on the roadway

- Bus dwell times at the stop are greater than an average of 30 seconds, especially during periods of poor LOS on the roadway
- Line of sight along the roadway near bus stop creates a less than desirable stopping distance for traffic to see a stopped bus

Using these guidelines as implementation standards, no locations along the three focused corridors included in this plan currently qualify for the installation of a bus pullover bay.

7.0 RECOMMENDATIONS AND PROJECT LIST

A series of infrastructure improvements are recommended to enhance the safety and ease of pedestrian access to transit. The recommended improvements are focused in locations previously identified as higher-ridership areas by the existence of bus shelters and benches. Each location contains a group of improvements to better pedestrian access. Improvements include all or a combination of sidewalk enhancements, curb ramps, modifications to existing traffic signals to include pedestrian signal heads and/or the installation of a HAWK Pedestrian Activated Signal.

7.1 MOBBERLY AVENUE CORRIDOR

Seven sets of projects are proposed along the Mobberly Avenue corridor. The project sets are shown in **Figures 7A through 7G**. Overall the corridor includes the following improvements:

- 14,795 LF of Sidewalks + Curb Ramps
- Pedestrian Upgrades at 2 Signalized Intersections
 - Intersection of South High Street and South Street
 - Intersection of Fifth Street and East Whaley Street
- 2 Pedestrian HAWK Signals along
 - Mobberly Avenue at the Main Post Office
 - South High Street at Work Force Solutions
- 1 Traditional Traffic Signal at
 - Intersection of Green Street and Avalon Avenue
- Total Estimated Construction Cost = \$ 1,111,480. Detailed breakdowns of the expected construction costs can be found in **Appendix C**.

7.2 COTTON STREET CORRIDOR

Two sets of projects are proposed along the Cotton Street corridor. These improvements are shown in **Figures 7H and 7I** and include:

- 2,180 LF of Sidewalks + Curb Ramps
- Pedestrian Upgrades at 1 Signalized Intersection
 - Intersection of Spur 63 and West Marshall Avenue
- Total Estimated Construction Cost = \$ 94,630. Detailed breakdowns of the expected construction costs can be found in **Appendix C**.

7.3 FOURTH STREET CORRIDOR







Five sets of projects are proposed along the Fourth Street corridor. The project sets are shown in **Figures 7J through 7N**. Overall the corridor includes the following improvements:

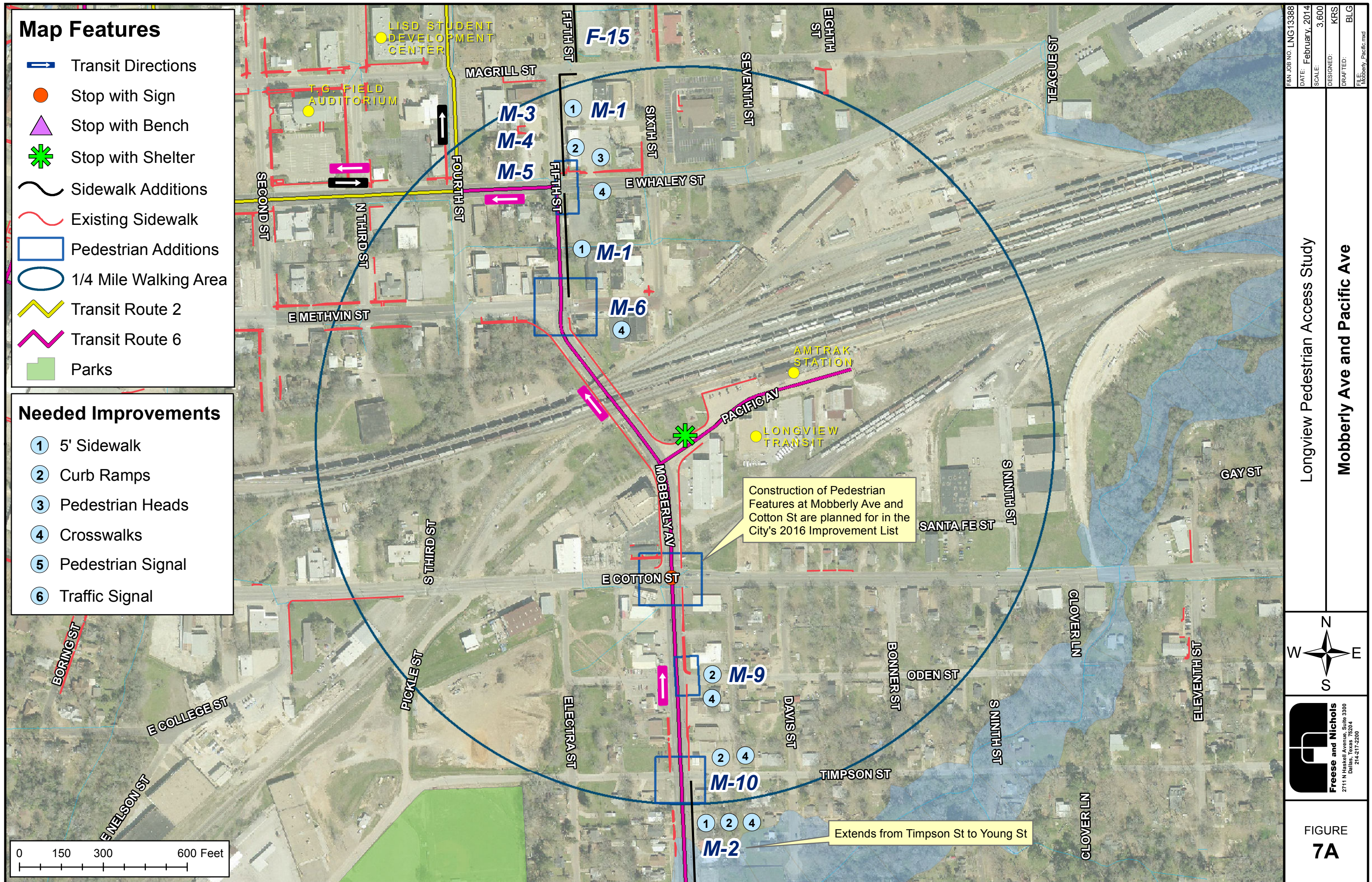
- 20,064 LF of Sidewalks + Curb Ramps
- 1 Traditional Traffic Signal at
 - Intersection of Fourth Street and Clinic Drive
- Total Estimated Construction Cost = \$ 833,090. Detailed breakdowns of the expected construction costs can be found in **Appendix C**.

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 2
-  Transit Route 6
-  Parks

Needed Improvements







-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal

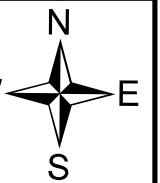
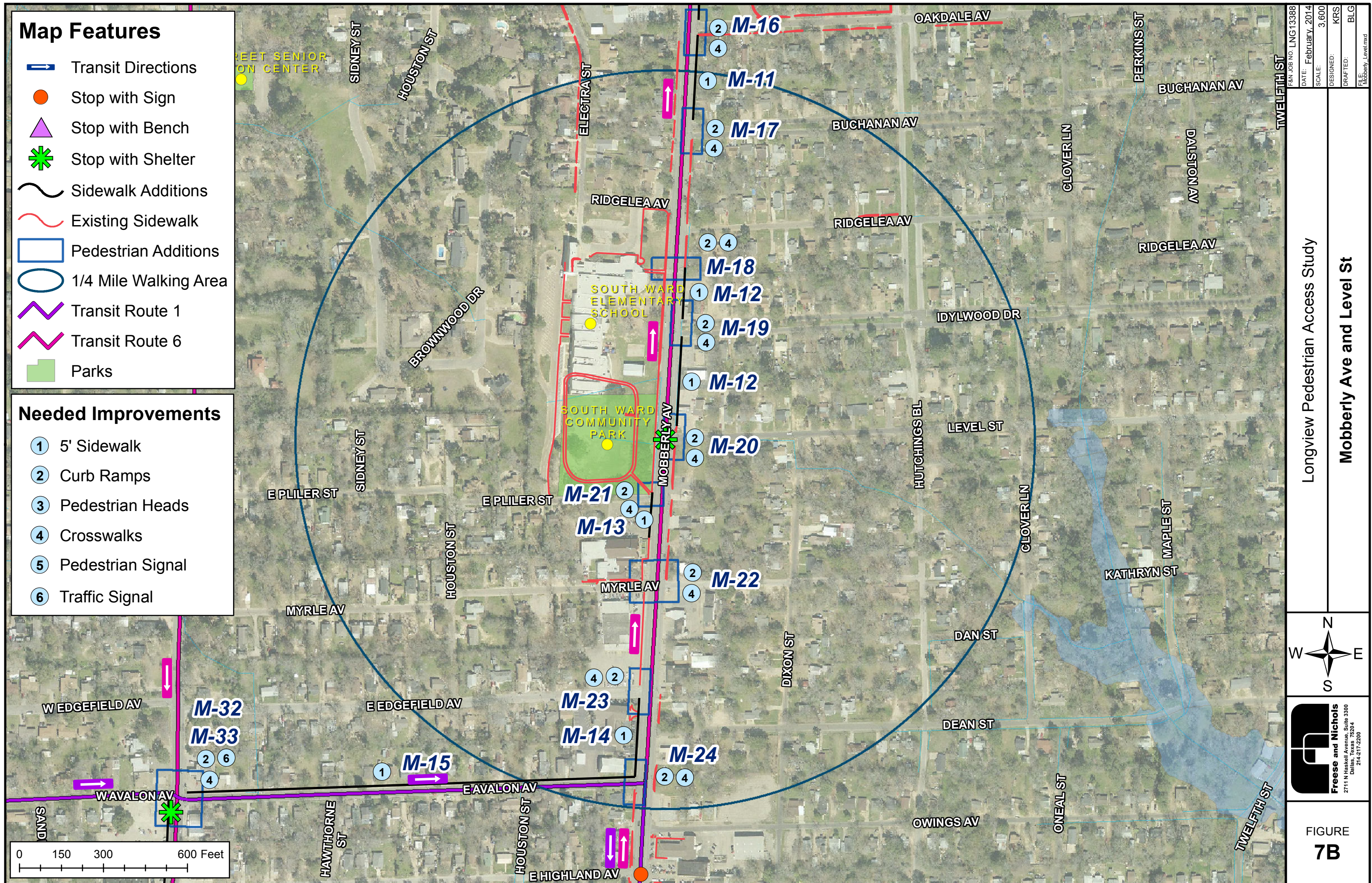


Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 1
-  Transit Route 6
-  Parks

Needed Improvements







-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal

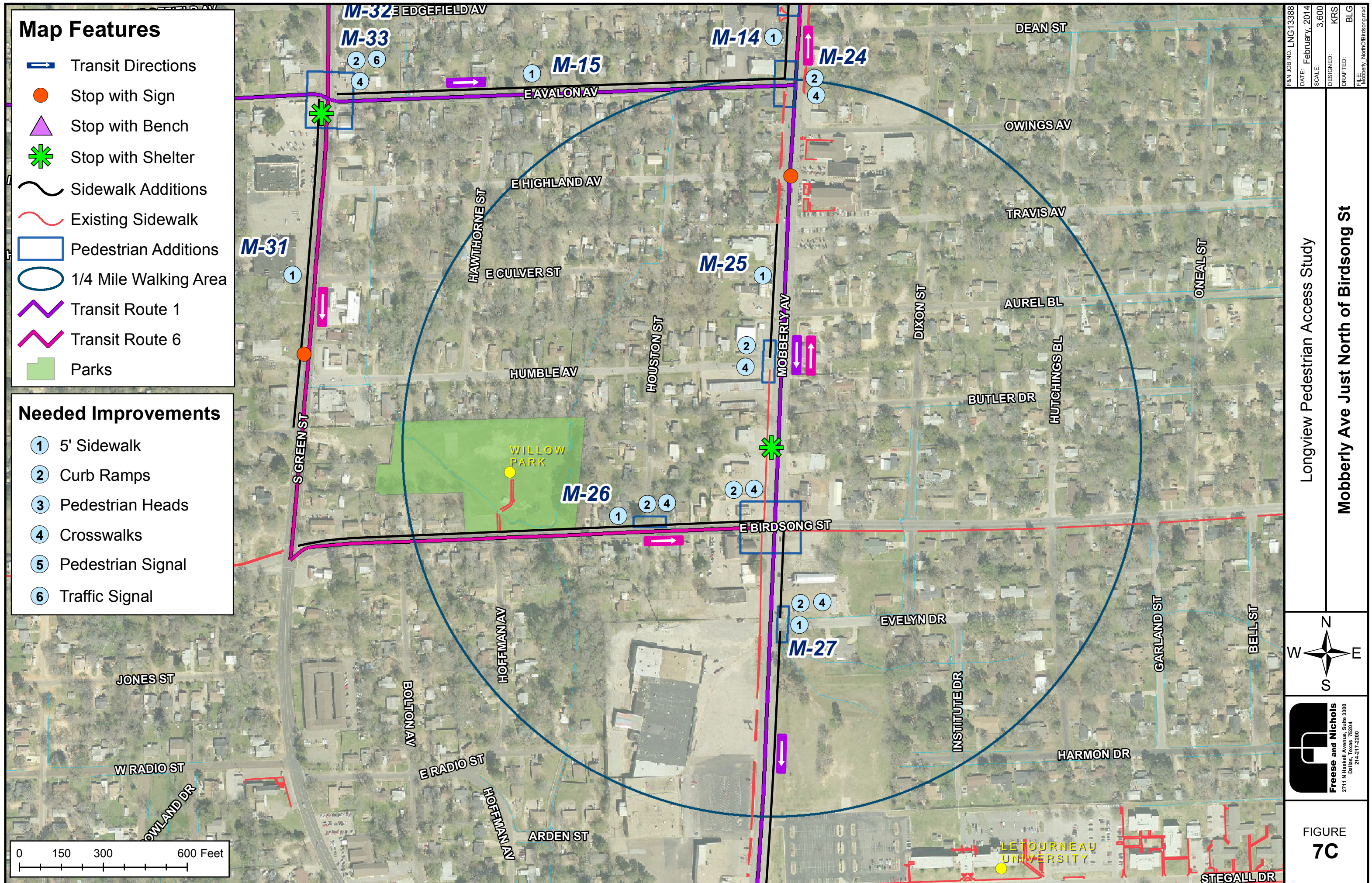


Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 1
-  Transit Route 6
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal



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| F&N JOB NO. LNG13388 | DATE: February, 2014 | SCALE: 3,600 | DESIGNED: KRS | DRAFTED: BLG |
| | | | | FILE: Mobberly_NorthOfBirdsong.mxd |

Longview Pedestrian Access Study

Mobberly Ave Just North of Birdsong St

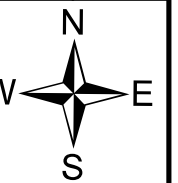




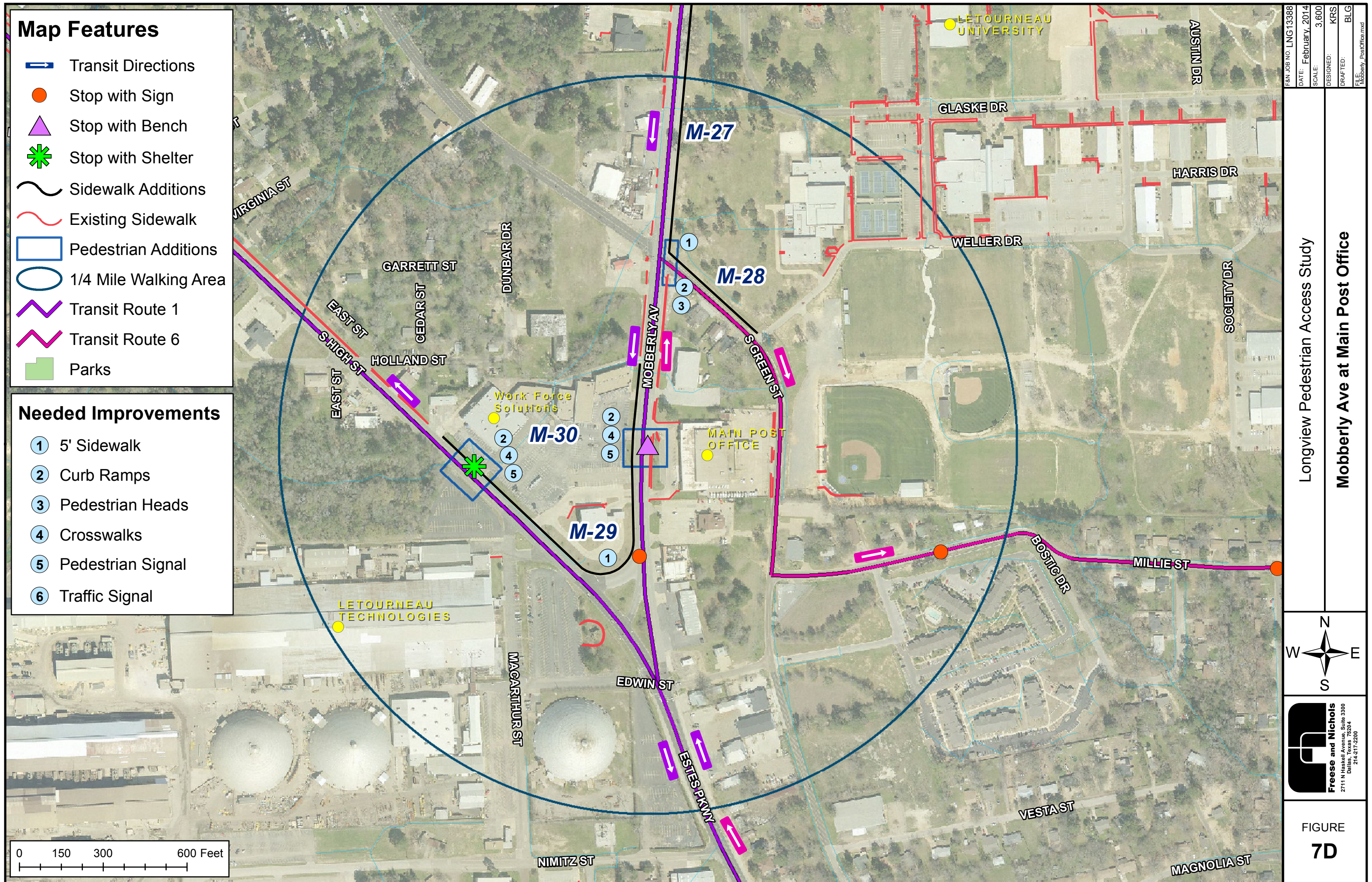
FIGURE
7C

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 1
-  Transit Route 6
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal



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| | | | | FILE: Mobberly_PostOffice.mxd |

Longview Pedestrian Access Study

Mobberly Ave at Main Post Office

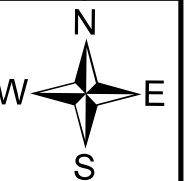
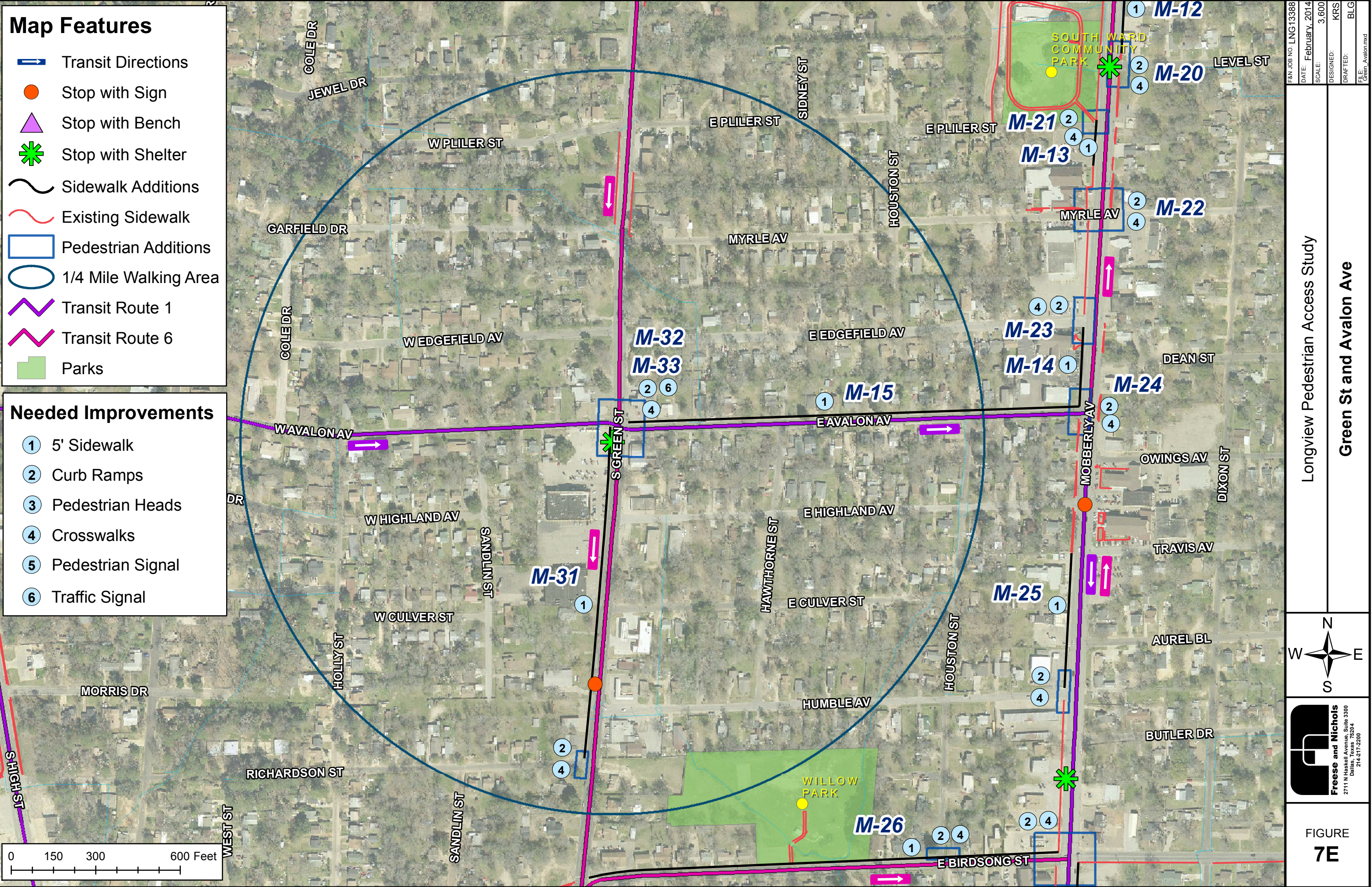


FIGURE
7D



Map Features

- Transit Directions
- Stop with Sign
- Stop with Bench
- Stop with Shelter
- Sidewalk Additions
- Existing Sidewalk
- Pedestrian Additions
- 1/4 Mile Walking Area
- Transit Route 1
- Transit Route 3
- Transit Route 6
- Parks

Needed Improvements

- 1 5' Sidewalk
- 2 Curb Ramps
- 3 Pedestrian Heads
- 4 Crosswalks
- 5 Pedestrian Signal
- 6 Traffic Signal

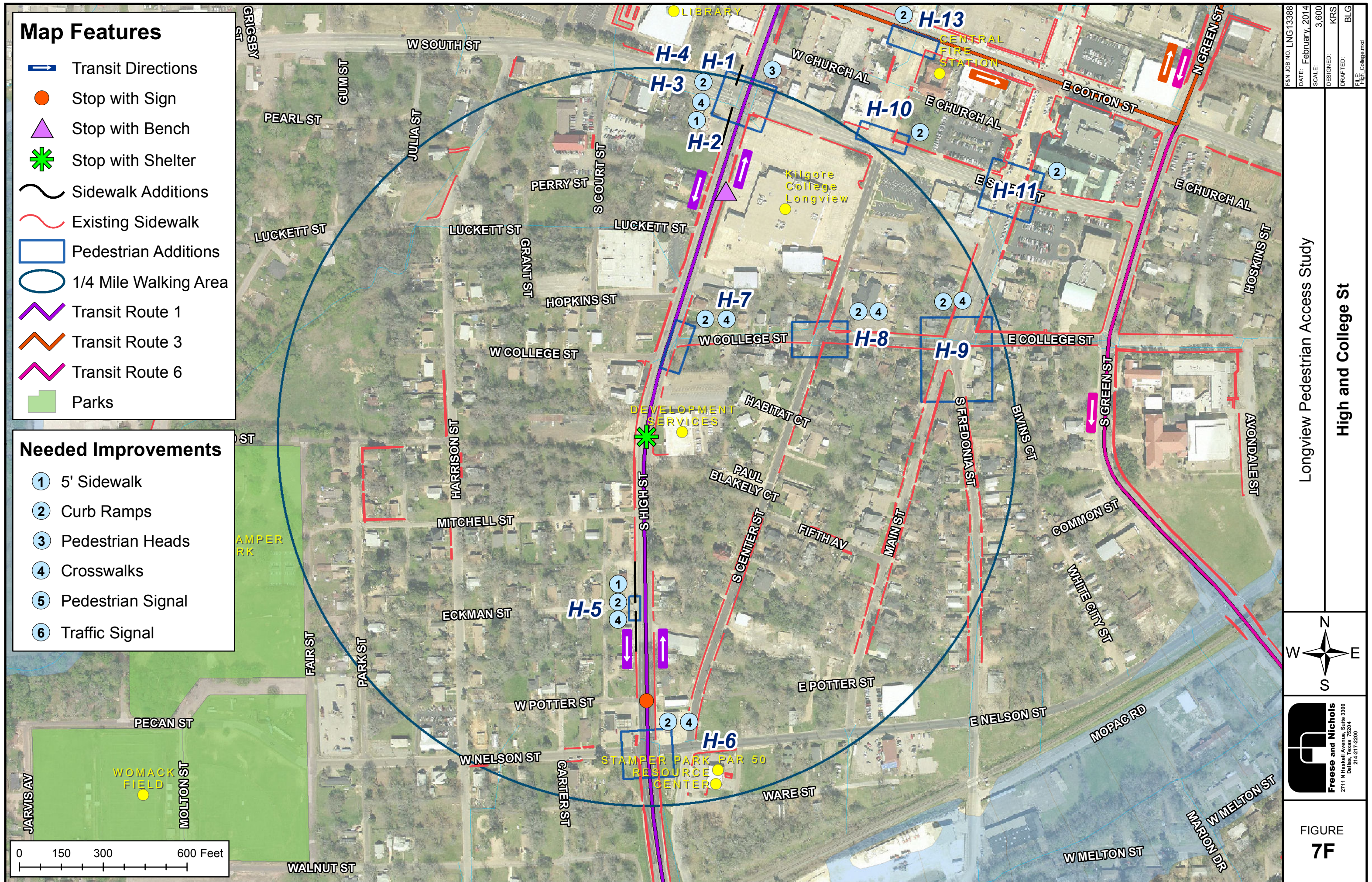








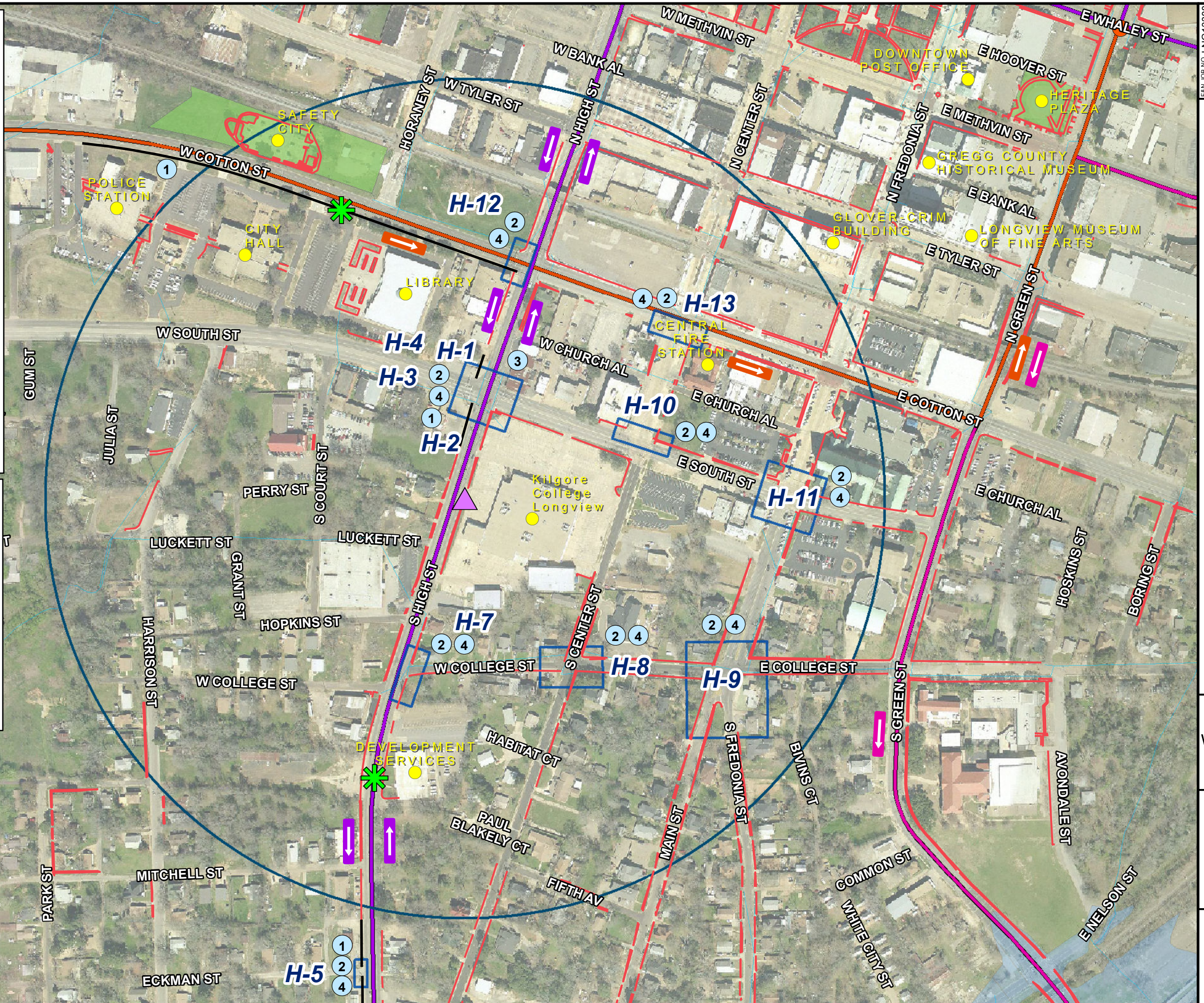
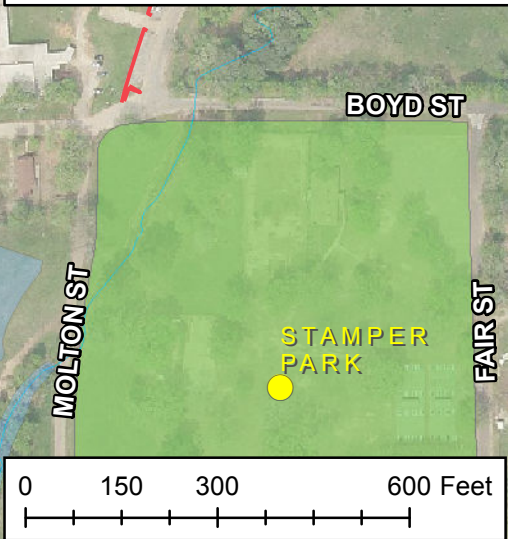
FIGURE
7F

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 1
-  Transit Route 3
-  Transit Route 6
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal



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| | | | FILE: High_KilgoreCollege.mxd | |

Longview Pedestrian Access Study

High St at Kilgore College

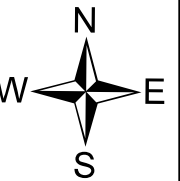







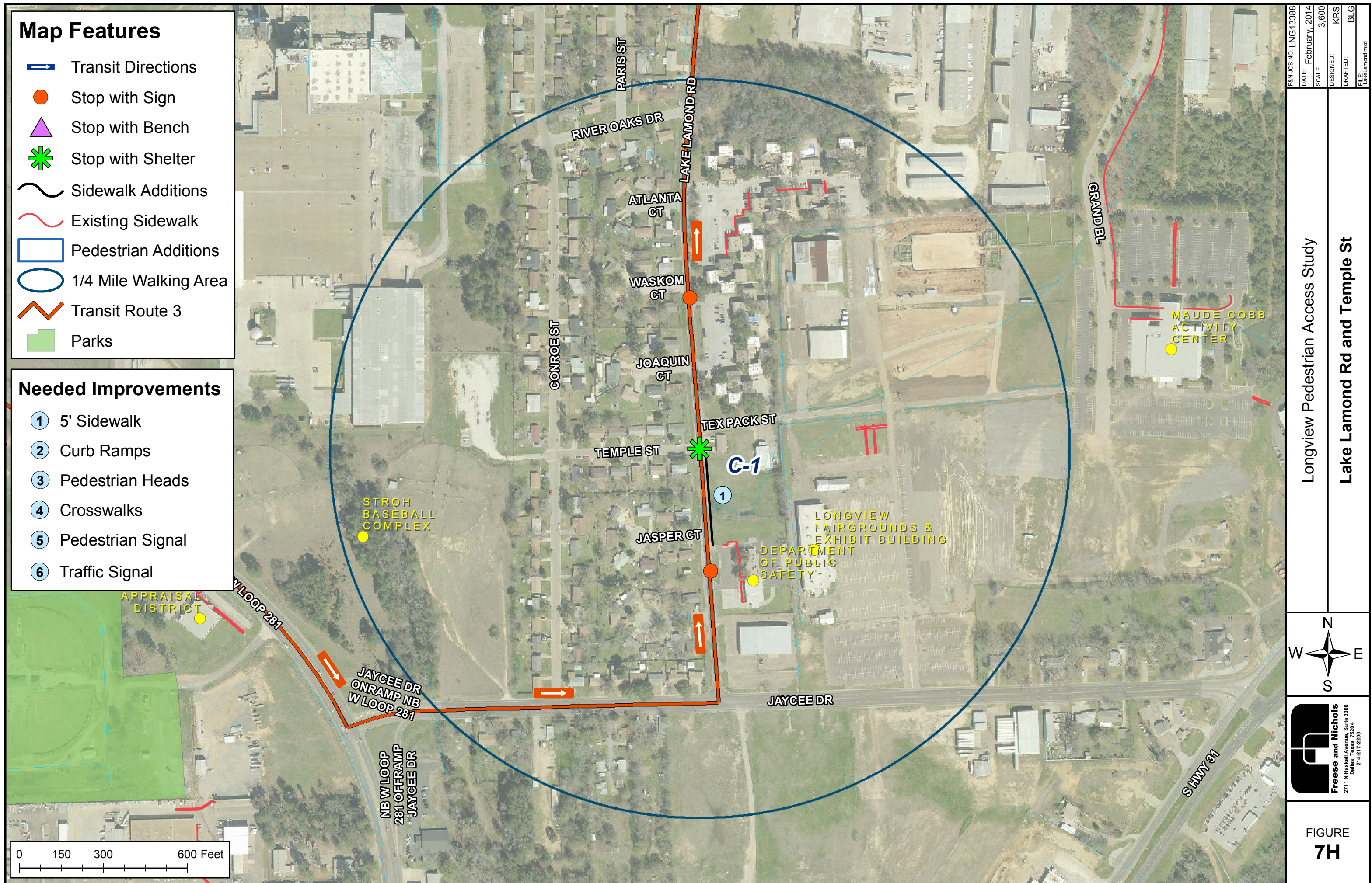
FIGURE
7G

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 3
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal



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Longview Pedestrian Access Study

Lake Lamond Rd and Temple St

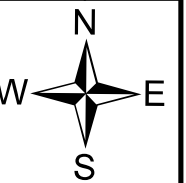








FIGURE
7H

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 3
-  Transit Route 5
-  Parks

Needed Improvements







-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal

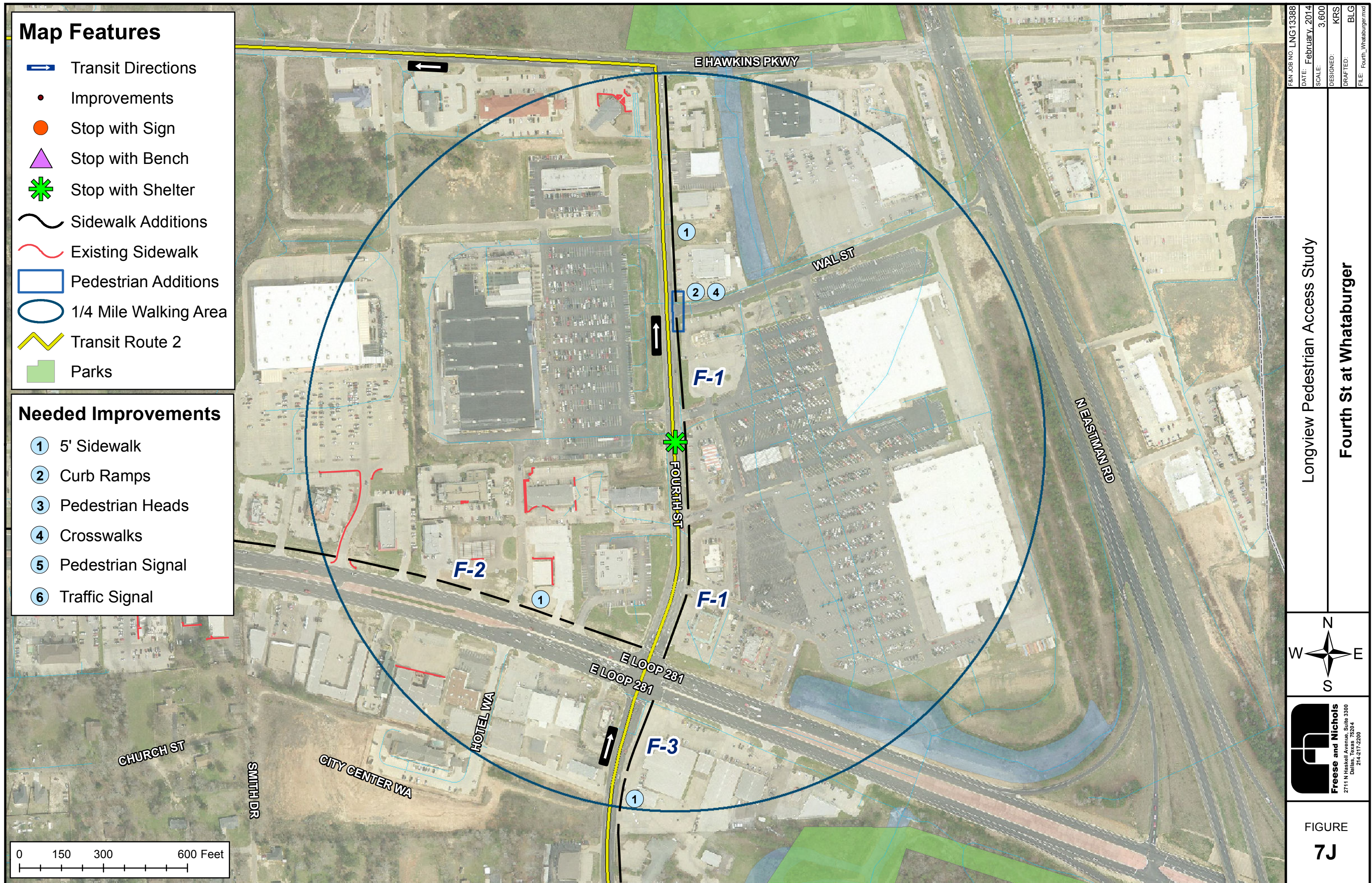


Map Features

-  Transit Directions
-  Improvements
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 2
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal



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Longview Pedestrian Access Study

Fourth St at Whataburger

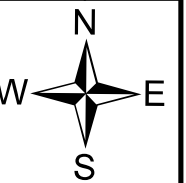








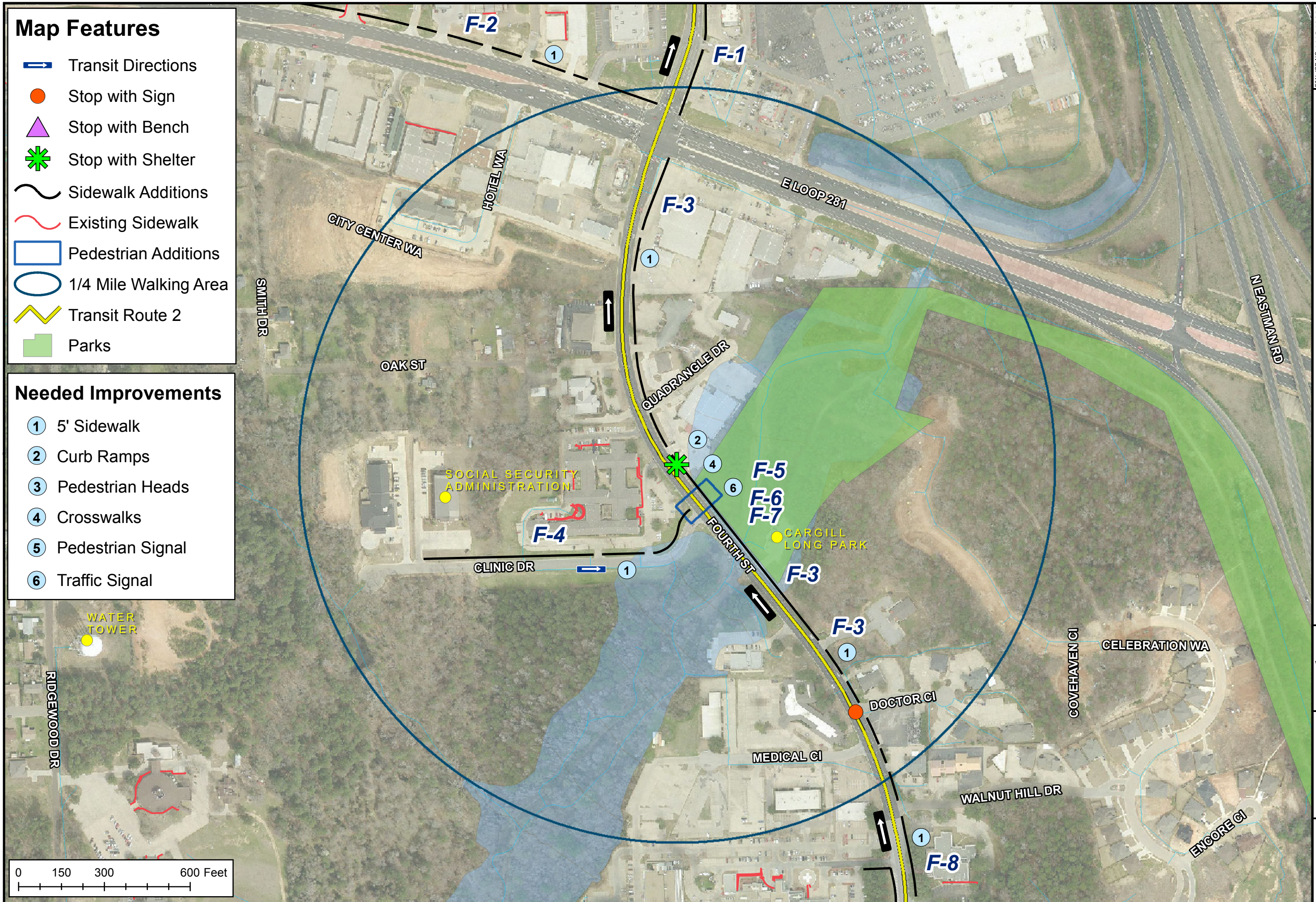
FIGURE
7J

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 2
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal



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Longview Pedestrian Access Study

Fourth St and Clinic Dr

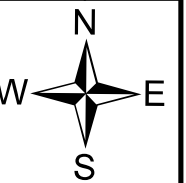






FIGURE
7K

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 2
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal

Extends from Hollybrook Dr to Coleman Dr

0 150 300 600 Feet



| | | | | | |
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| F&N JOB NO. LNG13388 | DATE: February, 2014 | SCALE: 3,600 | DESIGNED: KRS | DRAFTED: BLG | FILE: Fourth_Hollybrook.mxd |
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Longview Pedestrian Access Study

Fourth St and Hollybrook Dr

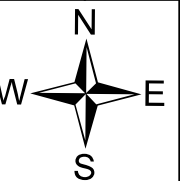








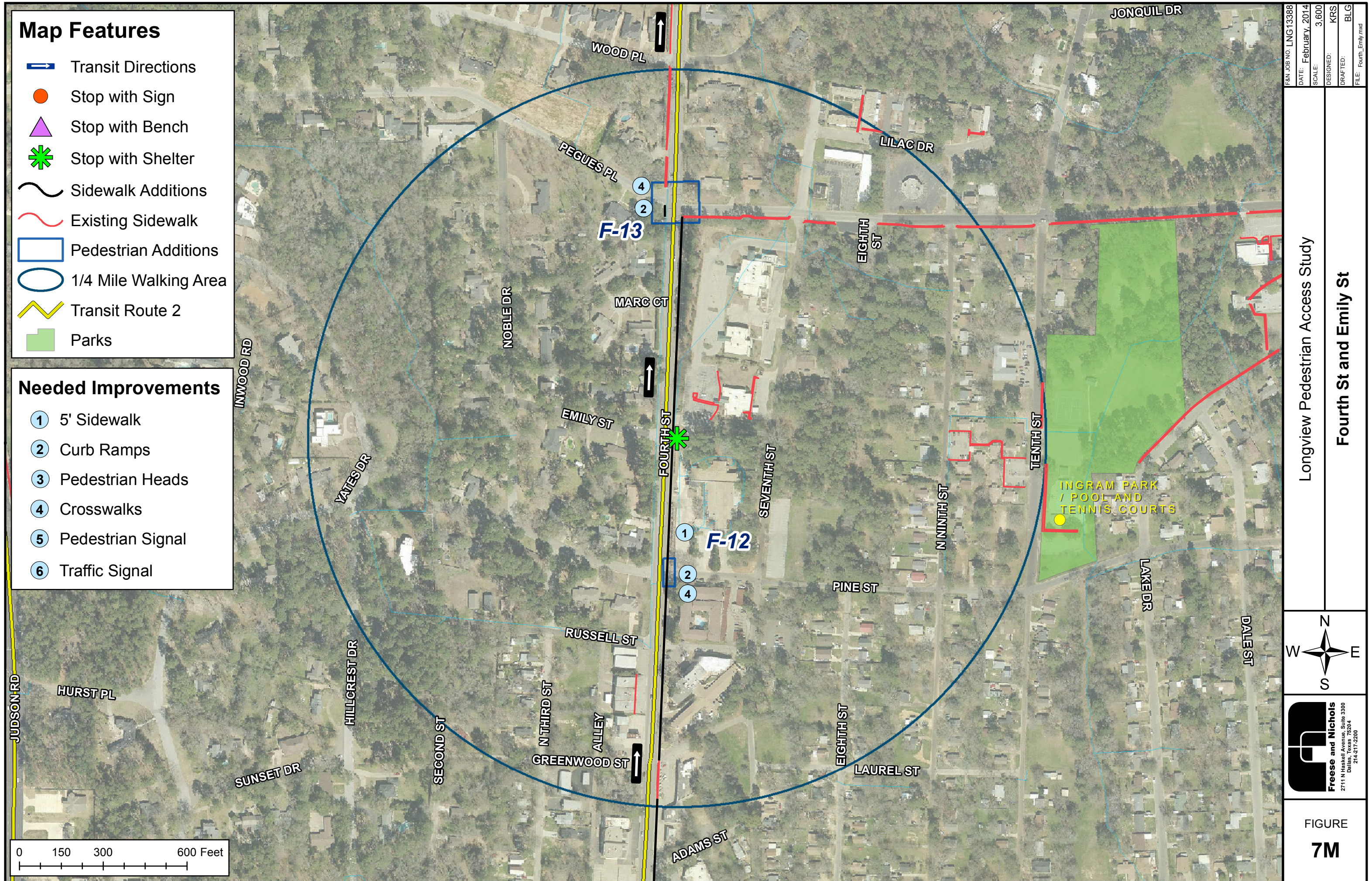
FIGURE
7L

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 2
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal



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| F&N JOB NO. | LNG13388 |
| DATE: | February, 2014 |
| SCALE: | 3,600 |
| DESIGNED: | KRS |
| DRAFTED: | BLG |
| FILE: | Fourth_Emily.mxd |

Longview Pedestrian Access Study

Fourth St and Emily St

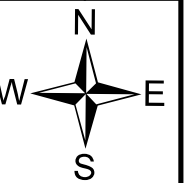






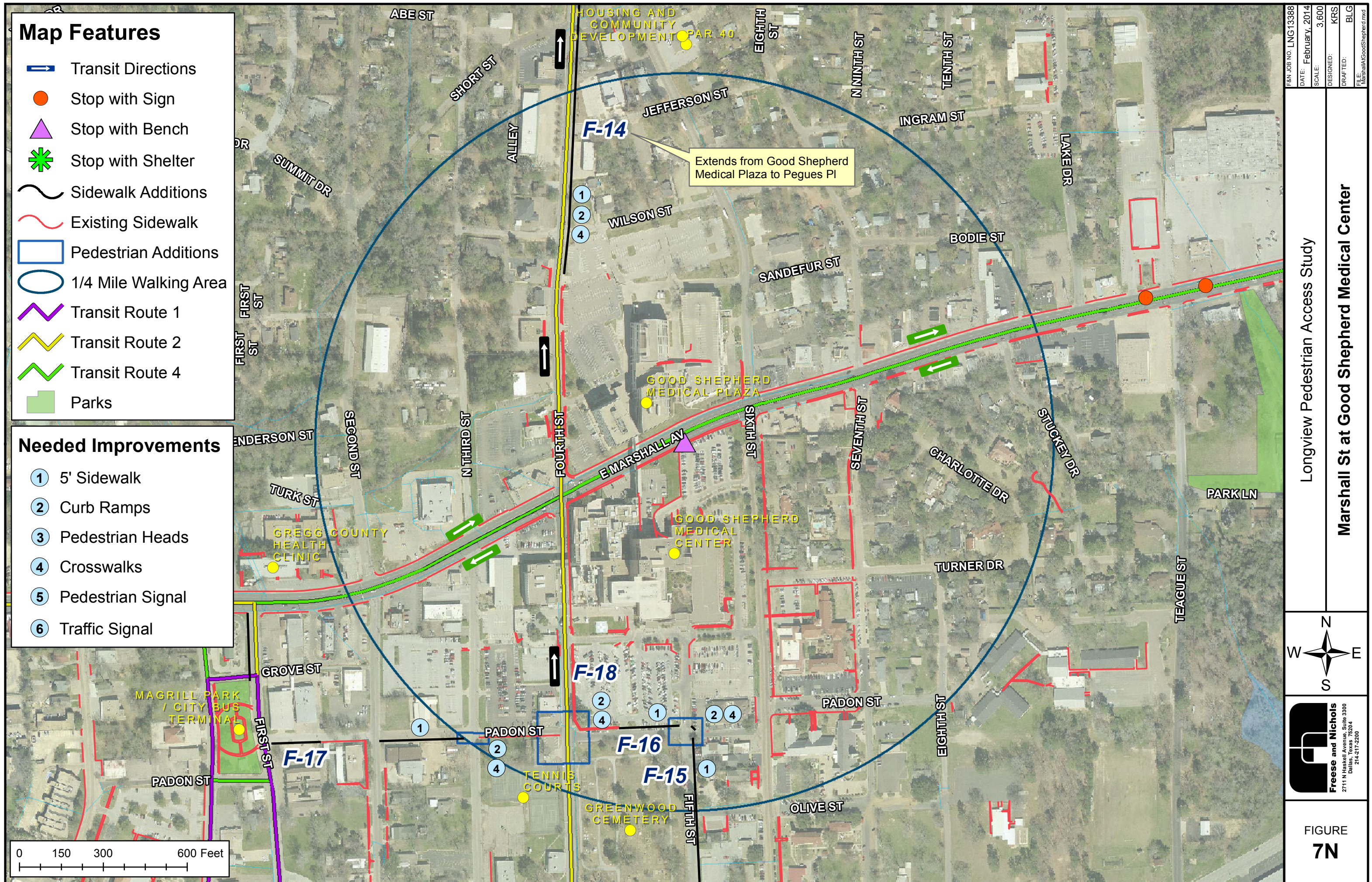
FIGURE
7M

Map Features

-  Transit Directions
-  Stop with Sign
-  Stop with Bench
-  Stop with Shelter
-  Sidewalk Additions
-  Existing Sidewalk
-  Pedestrian Additions
-  1/4 Mile Walking Area
-  Transit Route 1
-  Transit Route 2
-  Transit Route 4
-  Parks

Needed Improvements

-  1 5' Sidewalk
-  2 Curb Ramps
-  3 Pedestrian Heads
-  4 Crosswalks
-  5 Pedestrian Signal
-  6 Traffic Signal



7.4 OTHER IMPROVEMENTS TO EXISTING FACILITIES

During the sidewalk inventory, the existing sidewalks and ramps received a rating based on their current conditions. Sidewalks with little to no cracking were rated 'Good' and were not identified for repairs. Sidewalks with minor cracking, but no disconnected surfaces, received a rating of 'Fair' and were not identified for repairs. However, sidewalks with major cracking and/or upheaved surfaces were rated 'Poor' and identified for replacement. Location maps highlighting the recommended areas for replacement can be found in **Appendix A**. The total estimated cost for these repairs is \$476,640. An itemized summary by corridor is shown in **Table 2** and the detailed breakdown of the expected construction costs can be found in **Appendix C**.

Table 2 • Areas of Existing Sidewalk Replacement by Corridor

| Area of Replacement | Length | Estimated Cost |
|---|--------------------------|-------------------|
| MOBBERLY AVENUE CORRIDOR | | |
| Methvin Street to Cotton Street | 2,075 LF | \$ 83,000 |
| Cotton Street to Timpson Street | 850 LF | \$ 34,000 |
| Timpson Street to Young Street | 1,200 LF | \$ 48,000 |
| Along Young Street (Between Green Street and Mobberly Ave) | 480 LF | \$ 19,200 |
| Young Street to E Plilier Street | 3,000 LF | \$ 120,000 |
| Green Street to High Street | 275 LF | \$ 11,000 |
| | <i>Contingency (20%)</i> | <i>\$ 63,020</i> |
| Corridor's Estimated Repair Cost | | \$ 378,240 |
| COTTON STREET CORRIDOR | | |
| E College Street to Mobberly Ave | 1,350 LF | \$ 54,000 |
| | <i>Contingency (20%)</i> | <i>\$ 10,800</i> |
| Corridor's Estimated Repair Cost | | \$ 64,800 |
| FOURTH STREET CORRIDOR | | |
| Delwood Drive to Coleman Drive | 700 LF | \$ 28,000 |
| | <i>Contingency (20%)</i> | <i>\$ 5,600</i> |
| Corridor's Estimated Repair Cost | | \$ 33,600 |
| TOTAL REPLACEMENT COST | | \$ 476,640 |

7.5 PRIORITIZATION OF THE PROJECT LIST

The projects described in Sections 6.1, 6.2 and 6.3 were identified as improvements needed to facilitate better pedestrian access to transit. Despite their need, it is necessary to prioritize the projects in order to allocate the funds available for transit. Based on discussions with key stakeholders, the set of criteria listed below was defined for this study. Each evaluation criteria was assigned a value based upon its comparative importance to the other

criteria. The weighted values for each are shown in parentheses. Every proposed project was evaluated and scored based on the following criteria.

7.5.1 Economic Benefit and Feedback from the Public

This criterion captures the project's benefit to the transit rider. Projects that improve connectivity to large scale employers and/or major trip generators (i.e. Social Security Office) receive a higher rank in this criterion. Also, projects that infill missing ADA features and provide access for traditional Paratransit users to the fixed route system receive a higher rank in this criterion. Another measure considered when formulating this weight was the feedback received through this study's public outreach. Current and future transit users provided insight into specific areas and/or projects they would like implemented to improve their use of the system. Their thoughts and opinions were captured through on-board surveys, interviews, and personal interaction at the public forum held in early November. Projects identified through these outreach efforts receive a higher rank in this criterion.

7.5.2 Capital Cost

Construction costs are usually a key factor for ranking projects. Operationally, when limited funding is available, it better to implement several projects versus one improvement with high construction costs. Multiple projects spread the improvements further and therefore positively impacts more transit users. For the purpose of this study, projects with lower costs received a higher cost weight than projects with higher construction cost estimates.

7.5.3 Ease of Implementation

The Ease of Implementation measure includes environmental impacts and right-of-way (ROW) requirements. Projects with environmental abatement needs or concerns will require additional effort and/or costs to construct. Likewise, projects that require additional ROW will add time to an overall implementation plan. The additional time and costs these factors create need to be considered when developing a prioritized project list. Projects with these factors have a lower prioritization (as it related to 'Ease of Implementation') versus ones that provide access where none exist today, have no environmental impacts, and can be constructed without major ROW concerns.

7.5.4 Safety

Safety factor is an important criterion to assess the relative importance of one project over another. The adjacent roadway's traffic volumes, as well as the boarding/aligning data available in the area, were used as our measure. If an improvement is located near or adjacent to a high volume roadway, it received a higher safety weight. Likewise, if the improvement is located in an area of historically higher ridership, it received a higher safety weight. This approach allowed those projects located near high volume roadways, which experience higher ridership

volumes, to receive a higher priority ranking in safety. Since safety is the highest weighted criteria, projects that rank high here will be among the top priorities for the Longview Transit.

7.5.5 Final Ranking of Proposed Improvements

After defining the evaluation criteria, weights were established by the project's key stakeholders. The weights are based on a scale of 100. Safety received the highest weight with 40 points. Capital Cost ranked second in importance with a weight of 25 points. Economic Benefit and Feedback from the Public received 20 points. And finally, Ease of Implementation was assigned a weighted factor of 15 points. **Table 3** outlines how the maximum points for each criterion are subdivided and assigned.

Table 3 • Itemization of Evaluation Criteria and Contributing Measures

| Evaluation Criteria | Max Points | Point Value and Explanation | | |
|--|------------|-----------------------------|---------------------------------------|---------------------------------|
| Safety | 40 | 25 | 25 | Major Arterial (4-5 lanes) |
| Proximity to High Volume Roadways | | | 18 | Minor Arterial (2-4 lanes) |
| | | | 12 | Collector (2-3 lanes) |
| | | | 5 | Residential Collector (2 lanes) |
| High Propensity for Ridership | | 15 | 15 | Stop with Shelter |
| | | | 10 | Stop with Bench |
| | | | 5 | Stop with Sign |
| Capital Cost | 25 | 25 | \$0 - \$50k | |
| | | 18 | \$50k - \$100k | |
| | | 12 | \$100k - \$200k | |
| | | 5 | \$200k - \$300k | |
| | | 0 | Greater than \$300k | |
| Economic Benefit | 20 | 10 | Dependent on # Schools, Parks, Retail | |
| Connectivity to Major Generator ADA Compliance Public Outreach | | 8 | Dependent on Value Added to ADA | |
| | | 2 | If Public Input Provided | |
| | | | | |
| Ease of Implementation | 15 | 15 | No Potential Conflicts | |
| | | 10 | One Potential Conflict | |
| | | 5 | Two Potential Conflicts | |
| | | 0 | Three or More Potential Conflicts | |
| Total Points | 100 | | | |

The proposed projects were evaluated and scored based on the evaluation criteria. Detailed analysis of the prioritization is included in **Appendix C**, which shows the score each project received compared to the maximum

available points. **Table 4** summarizes the overall prioritized ranking, while **Table 5** breaks the ranked projects into their respective corridors.

Table 4 • Final Prioritized Ranking of Proposed Improvements

| Rank | Pedestrian Transit Area /Proposed Improvement | Score | Estimated Cost |
|--|--|-------|---------------------|
| 1 | HIGH ST @ KILGORE COLLEGE H-10,H-11,H-12,H-13 | 81 | \$ 14,970 |
| 2 | HIGH ST @ COLLEGE ST H-1,H-2,H-3,H-4,H-5,H-6,H-7,H-8,H-9 | 81 | \$ 52,010 |
| 3 | LAKE LAMOND @ TEMPLE ST C-1 | 79 | \$ 10,770 |
| 4 | MARSHALL ST@ FAGAN ST C-2,C-3,C-4,C-5,C-6 | 79 | \$ 83,860 |
| 5 | FOURTH ST @ WHATABURGER F-1,F-2 | 75 | \$ 131,420 |
| 6 | FOURTH ST @ EMILY F-12,F-13 | 74 | \$ 71,880 |
| 7 | MOBBERLY AVE @ LEVEL ST M-11,M-12,M-13,M-14,M-15,M-16,M-17,M-18,M-19, M-20,M-21,M-22,M-23,M-24 | 73 | \$ 112,950 |
| 8 | MOBBERLY AVE @ N. OF BIRDSONG M-25,M-26,M-27 | 73 | \$ 150,740 |
| 9 | MOBBERLY AVE @ PACIFIC AVE M-1,M-2,M-3,M-4,M-5,M-6,M-9,M-10 | 65 | \$ 123,300 |
| 10 | FOURTH ST @ HOLLYBROOK F-8,F-9,F-10,F-11 | 65 | \$ 198,510 |
| 11 | GREEN ST @ AVALON AVE M-31,M-32,M-33 | 63 | \$ 248,520 |
| 12 | MOBBERLY AVE @ MAIN POST OFFICE M-28,M-29,M-30 | 62 | \$ 408,990 |
| 13 | MARSHALL ST @ GOOD SHEPHERD F-14,F-15,F-16,F-17,F-18 | 54 | \$ 123,220 |
| 14 | FOURTH ST @ CLINIC F-3,F-4,F-5,F-6,F-7 | 53 | \$ 308,060 |
| Total Estimated Construction Cost | | | \$ 2,039,200 |

Table 5 • Prioritized Ranking of Proposed Improvements by Corridor

| Rank | Pedestrian Transit Area /Proposed Improvement | Score | Estimated Cost |
|---|--|-------|---------------------|
| MOBBERLY AVENUE CORRIDOR | | | |
| 1 | HIGH ST @ KILGORE COLLEGE H-10,H-11,H-12,H-13 | 81 | \$ 14,970 |
| 2 | HIGH ST @ COLLEGE ST H-1,H-2,H-3,H-4,H-5,H-6,H-7,H-8,H-9 | 81 | \$ 52,010 |
| 7 | MOBBERLY AVE @ LEVEL ST M-11,M-12,M-13,M-14,M-15,M-16,M-17,M-18,M-19, M-20,M-21,M-22,M-23,M-24 | 73 | \$ 112,950 |
| 8 | MOBBERLY AVE @ N. OF BIRDSONG M-25,M-26,M-27 | 73 | \$ 150,740 |
| 9 | MOBBERLY AVE @ PACIFIC AVE M-1,M-2,M-3,M-4,M-5,M-6,M-7,M-8,M-9,M-10 | 65 | \$ 123,300 |
| 11 | GREEN ST @ AVALON AVE M-31,M-32,M-33 | 63 | \$ 248,520 |
| 12 | MOBBERLY AVE @ MAIN POST OFFICE M-28,M-29,M-30 | 62 | \$ 408,990 |
| Corridor's Estimated Construction Cost | | | \$ 1,111,480 |
| COTTON STREET CORRIDOR | | | |
| 3 | LAKE LAMOND @ TEMPLE ST C-1 | 79 | \$ 10,770 |
| 4 | MARSHALL ST@ FAGAN ST C-2,C-3,C-4,C-5,C-6 | 79 | \$ 83,860 |
| Corridor's Estimated Construction Cost | | | \$ 94,630 |
| FOURTH STREET CORRIDOR | | | |
| 5 | FOURTH ST @ WHATABURGER F-1,F-2 | 75 | \$ 131,420 |
| 6 | FOURTH ST @ EMILY F-12,F-13 | 74 | \$ 71,880 |
| 10 | FOURTH ST @ HOLLYBROOK F-8,F-9,F-10,F-11 | 65 | \$ 198,510 |
| 13 | MARSHALL ST @ GOOD SHEPHERD F-14,F-15,F-16,F-17,F-18 | 54 | \$ 123,220 |
| 14 | FOURTH ST @ CLINIC F-3,F-4,F-5,F-6,F-7 | 53 | \$ 308,060 |
| Corridor's Estimated Construction Cost | | | \$ 833,090 |

Based upon the scoring results presented in **Table 4**, the projects were separated into short, medium, and long range implementation windows. Short range projects are defined as improvements planned for implementation in the next two years. The medium range improvements are slated for construction within two to five years. And finally projects classified as long range improvements will likely be in place in a five- to ten-year timeframe. Chapter 8 discusses the funding options and timeframes for each project.

8.0 ENVIRONMENTAL SCAN

An initial Environmental Scan was conducted as part of this study. The objective of the scan was to perform a limited pedestrian survey of the proposed improvements and identify any potential environmental issues in the immediate vicinity. A full memorandum outlining the analysis can be found in **Appendix D**. Overall, the scan focused on some of the most common environmental permitting considerations including:

- Waters of the U.S. and Section 404 Permitting
- Endangered Species
- Floodplains
- Historic Properties
- Texas Pollutant Discharge Elimination Systems Permits
- Environmental Justice and Limited English Proficiency Populations
- Section 4(f) and Parklands
- Community Cohesion
- Texas Department of Transportation (TxDOT) Roadways
- Air Quality
- Environmental Regulatory Records Review

Based on the design information available at this time, no impacts to endangered species, their habitats, or Waters of the U.S. are anticipated as result of the proposed improvements. However, the scan did reveal several potential environmental permitting considerations that should be addressed prior to construction.

8.1 SITES WITH RECOGNIZED ENVIRONMENTAL CONDITIONS

A desktop evaluation for the presence of regulated material sites was conducted along each of the focused corridors. Federal and state records were searched to provide information regarding facilities that utilize hazardous substances or petroleum products, any incidents involving these facilities, and the potential or known impacts each site poses to this plan's proposed improvements. Out of the nearly 400 properties identified within the corridors, two of the facilities pose a recognized environmental condition (REC) concern. Both locations are

along the Mobberly Avenue corridor. Three additional sites appear to be potential RECs due to ongoing investigations of leaking petroleum storage tanks. See **Appendix D** for location descriptions and detailed analysis.

Constructing the proposed sidewalk improvements on and/or near the sites with a REC may require additional research through the Texas Commission on Environmental Quality (TCEQ) or field investigation. Due to the high potential for encountering contaminated soils on REC sites, any materials excavated for the sidewalk construction that cannot be replaced on that property should not be reused as clean fill material off-site. The excess soil may require proper characterization for waste disposal purposes.

8.2 COORDINATION WITH OTHER AGENCIES

Several of the proposed sidewalk additions are located within the 100-Year Floodplain recognized by the Federal Emergency Management Agency (FEMA). In addition, some of the sidewalk extensions are located within the right-of-way of TxDOT-controlled roadways. See **Appendix D** for specific location descriptions. Both agencies would likely require design coordination as well as additional permits before any construction activities may advance.

Other considerations that should be addressed prior to construction include coordination with the Texas Historical Commission (THC) and TCEQ. Any project sponsored by a state entity, such as the City of Longview, that has the potential to disturb 5,000 cubic yards or five acres, must be reviewed by THC for compliance with Section 191.0525(d) of the Antiquities Code of Texas. The THC review and concurrence can be addressed with a coordination letter. **Appendix D** contains a letter describing the proposed improvements that may be used for this coordination effort. Similarly, TCEQ may also require permit authorization and/or action plans for the storm water discharges associated with construction activities. **Appendix D** provides more details on the TCEQ coordination efforts required, based on project size.

9.0 FINANCIAL IMPLEMENTATION STRATEGY

The recommendations described in this report are considered the most important for enhancing pedestrian safety and personal mobility. Resources to fund these important improvements are available on the local, state and federal levels. Identifying the appropriate funding mechanisms begin with understanding the available options.

9.1 LOCAL FUNDING RESOURCES

The City of Longview may fund a portion of these projects with its local funding tools. Several options exist at this level of funding. One option involves the City allocating a portion of the revenues it receives annually to the building of sidewalks and crossing enhancements. Other cities have experienced success with this approach by designating a certain baseline of their general funds for strategic implementation of a program, such as the completion of an ADA transition plan. Another possible funding method involves the City selling revenue bonds to finance targeted improvements. The City of Longview has successfully executed this method with its Capital Improvement Program (CIP). Projects identified by this report could be incorporated in the next CIP call for projects. A final local funding option involves the procurement of private funds. Partnerships with local businesses and/or advocacy groups can help fund segments of facilities or needed amenities. Longview Transit has successfully implemented a bus shelter maintenance program, allowing private advertising in exchange for maintaining bus shelter infrastructure. Exploring ways to expand these public-private partnerships could lead to funding dollars for the needed sidewalk and ADA enhancements.

9.2 NON-LOCAL FUNDING RESOURCES

The City of Longview could leverage local funds to obtain additional funding through grants available from state and federal programs. Two primary sources of funding for implementing the pedestrian access to transit improvements are the Community Development Block Grant Program and the Federal Transportation Alternatives Program.

There are a number of different funding sources that can be considered for financing the proposed improvements. However, the availability of these other funds is difficult to predict. Many times these programs have limited dollars available for award and a high number of applicants seeking them. Careful consideration of the time required to pursue a program versus the likelihood of award, should be given to available programs with limited resources.

9.2.1 Prime Funding Mechanisms

The **Community Development Block Grant (CDBG) Program** is one of the longest continuously run programs at the US Department of Housing and Urban Development (HUD), and is a flexible program that provides communities with resources to address a wide range of unique community development needs. The CDBG program works to ensure decent affordable housing, to provide services to the most vulnerable in our communities, and to create jobs through the expansion and retention of businesses. At least 70 percent of CDBG funds must be used for activities that benefit low and moderate income persons. In addition, each activity must meet one of the following national objectives for the program: (1) benefit low- and moderate-income persons, prevention or elimination of slums or blight, or (2) address community development needs having a particular urgency due to existing conditions posing a serious and immediate threat to the health or welfare of the community for which other funding is not available.

The City of Longview currently uses this program to fund some of its other projects, such as low-income housing and utility improvements. Staff members are very familiar with the requirements and could use CDBG dollars to fund several of the proposed projects, particularly along Mobberly Avenue. However, a finite amount of funds are available for CDBG activities each year. By allocating a portion to construct the pedestrian improvements identified by this study, the City will limit its use of CDBG funds on other projects.

Another viable source of funding for the City of Longview is the **Transportation Alternatives Program (TAP)**, which was authorized under MAP-21: Moving Ahead for Progress in the 21st Century (the current two-year national transportation funding and authorization bill passed in 2012). The TAP provides funding for programs and projects that are defined as transportation alternatives, and incorporates the project categories of the former Transportation Enhancement (TE) and Safe Routes to School (SRTS) programs of the national funding predecessors into one flexible program. General types of projects eligible under this program include:

- On- and off-road pedestrian and bicycle facilities
- Infrastructure projects for improving non-driver access to public transportation
- Enhanced mobility and improved safety and access to schools
- Pedestrian facilities and amenities along boulevards and similar multi-modal roadways

The TAP funding available to communities in the East Texas area is overseen by the Texas Department of Transportation (TxDOT). Using the general federal guidelines for types of projects eligible under the program, TxDOT will establish their own guidelines for administering the funds. To date the Department has not finalized their rules and guidelines, which are prerequisites for allocating the two years of funding authorization. The TAP

projects are expected to require at least 20 percent local match to qualify for funding, with more local participation garnering greater evaluation scoring.

By the time TxDOT issues their call for TAP projects sometime in 2014, the City of Longview and Longview Transit should be in concurrence regarding the top priorities for projects to submit for potential funding. The City of Longview should prepare a memoranda of understanding with potential funding partners, and gather support letters from partner agencies and advocates.

9.2.2 Other Available Programs with Limited Resources

The **Livability Communities Initiative (LCI)** is a program of the Interagency Partnership for Sustainable Communities – which is a collaboration of the Department of Transportation (DOT), the Environmental Protection Agency (EPA), and the Department of Housing and Urban Development (HUD). These groups are working together like never before to provide citizens with access to affordable housing, a wider range of transportation options, and lower transportation costs, while protecting the environment in communities nationwide.

The streetscape infrastructure (including sidewalks, crossings and amenities) for transit access within one-half mile walking distance of a fixed bus route or transit station is eligible for federal funding under the Federal Transit Administration's LCI. This funding source was the intended target for preparation of this Pedestrian Transit Access Plan. All improvements identified here are in line with the expected evaluation criteria for the program. However, the time frame for which the program will issue a Call for Projects is unknown.

Another potential funding mechanism is available through the **Texas Main Street Program (TMSP)**. It is one of the oldest and largest in the nation, with more than 80 fully designated communities. The TMSP is part of the Community Heritage Development Division of the Texas Historical Commission and operates in affiliation with the National Main Street Center, a subsidiary of the National Trust for Historic Preservation. The City of Longview is a current member of the Texas Main Street Program. Every year the TMSP Improvements Program provides eligible Texas Main Street communities with matching grants to expand or enhance public infrastructure in historic main street areas. Applications are due each October, with available funding of \$50,000 to \$150,000.

Texas Parks & Wildlife Department administers the **National Recreational Trails Fund (NRTF)** in Texas under the approval of Federal Highway Administration (FHWA). This federally funded program receives its funding from a portion of federal gas taxes paid on fuel used in non-highway recreational vehicles. The grants can be up to 80% of project cost with a maximum of \$200,000 for non-motorized trail grants. Funds can be spent on both motorized and non-motorized recreational trail projects such as the construction of new recreational trails, improvement to existing trails, development of trailheads or trailside facilities, and acquisition of trail corridors. The application deadline is February 1st of each year.

Although none of the recommended projects are exclusively trails, several improvements are near future trailheads. The proposed crossing enhancements at Fourth Street and Clinic Drive are located very close to a future trailhead for Cargill Long Trail. The City plans to construct a parking area and trail entrance on the east side of Fourth Street near the intersection. By incorporating these two projects into one, a win-win scenario is created, where pedestrians have additional access via the trail and trail users have a safer crossing at Fourth Street. This combined project could take advantage of funding provided through the NRTF. The NRTF funding may also apply to the Marshall Avenue and Fagan Street project. The Maude Cobb Convention Center and P.G. Boorman Trail are located just west of the proposed improvements. The City plans to connect the Convention Center to the trail. The connection details are not defined at this time; however, depending on its placement, portions of the access-to-transit improvements could qualify from NRTF funding.

9.3 MATRIX OF POTENTIAL FUNDING RESOURCES

Not every funding source is appropriate for every project. Depending on the recommended improvement, a project may or may not qualify for a particular source. This is especially true for the non-local funds. The proposed improvements were cross referenced with the available funding mechanisms. **Table 6** outlines which programs should be pursued for each project.

Table 6 • Matrix of Potential Funding Resources

| Project | Key Features | Estimated Cost | Target Timeline | Potential Funding Resources |
|--|---|---------------------|-----------------|--|
| HIGH ST @ KILGORE COLLEGE | <ul style="list-style-type: none"> – Completing sidewalk gaps – Installation of street crossings – Installation of pedestrian signal heads | \$ 14,970 | Short Range | Local Funds LCI Funds TMSP Funds |
| HIGH ST @ COLLEGE ST | <ul style="list-style-type: none"> – Completing sidewalk gaps – Installation of street crossings – Installation of pedestrian signal heads | \$ 52,010 | Short Range | Local Funds LCI Funds |
| LAKE LAMOND @ TEMPLE ST | <ul style="list-style-type: none"> – Installation of sidewalk ramps – Installation of street crossings | \$ 10,770 | Short Range | Local Funds CDBG Funds LCI Funds |
| MARSHALL ST @ FAGAN ST | <ul style="list-style-type: none"> – Installation of 1,800 LF of sidewalk – Installation of street crossings – Installation of pedestrian signal heads | \$ 83,860 | Short Range | Local Funds LCI Funds TMSP Funds NRTF |
| Total Estimated Construction Costs for Short Range Timeline | | \$ 161,610 | | |
| FOURTH ST @ WHATABURGER | <ul style="list-style-type: none"> – Installation of 4,600 LF of sidewalk – Installation of street crossings | \$ 131,420 | Mid-Range | Local Funds TAP Funds LCI Funds |
| FOURTH ST @ EMILY | <ul style="list-style-type: none"> – Installation of 2,300 LF of sidewalk – Installation of street crossings | \$ 71,880 | Mid-Range | Local Funds LCI Funds |
| MOBBERLY AVE @ LEVEL ST | <ul style="list-style-type: none"> – Installation of 3,000 LF of sidewalk – Installation of street crossings | \$ 112,950 | Mid-Range | Local Funds CDBG, TAP Funds LCI Funds |
| MOBBERLY AVE @ N. OF BIRDSOING | <ul style="list-style-type: none"> – Installation of 5,000 LF of sidewalk – Installation of street crossings | \$ 150,740 | Mid-Range | Local Funds CDBG, TAP Funds LCI Funds |
| MOBBERLY AVE @ PACIFIC AVE | <ul style="list-style-type: none"> – Installation of 3,000 LF of sidewalk – Installation of street crossings – Installation of pedestrian signal heads | \$ 123,300 | Mid-Range | Local Funds CDBG Funds LCI Funds |
| Total Estimated Construction Costs for Mid-Range Timeline | | \$ 590,290 | | |
| FOURTH ST @ HOLLYBROOK | <ul style="list-style-type: none"> – Installation of 6,500 LF of sidewalk – Installation of street crossings | \$ 198,510 | Long Range | Local Funds TAP Funds LCI Funds |
| GREEN ST @ AVALON AVE | <ul style="list-style-type: none"> – Installation of sidewalk – Installation of street crossings – Installation of traditional traffic signal | \$ 248,520 | Long Range | Local Funds TAP Funds LCI Funds |
| MOBBERLY AVE @ MAIN POST OFFICE | <ul style="list-style-type: none"> – Installation of sidewalk – Installation of street crossings – Installation of pedestrian HAWK signals | \$ 408,990 | Long Range | Local Funds TAP Funds LCI Funds |
| MARSHALL ST @ GOOD SHEPHERD | <ul style="list-style-type: none"> – Installation of 3,000 LF of sidewalk – Installation of street crossings | \$ 123,220 | Long Range | Local Funds LCI Funds TMSP Funds |
| FOURTH ST @ CLINIC | <ul style="list-style-type: none"> – Installation of sidewalk – Installation of street crossings – Installation of traditional traffic signal | \$ 308,060 | Long Range | Local Funds TAP Funds LCI Funds NRTF |
| Total Estimated Construction Costs for Long Range Timeline | | \$ 1,287,300 | | |
| TOTAL CONSTRUCTION COSTS | | \$ 2,039,200 | | |

9.3.1 Combination of Projects to Seek Funding

The projects shown in **Table 6** are grouped so that the construction costs associated with each are manageable and reasonably priced for local funding options. However, to competitively pursue some of the funding resources described in Section 8.2, the projects may need to be combined to form larger scopes of work. Many of these funding options require a notable amount of effort to secure funds. Without bundling projects, it would likely not be worth the City's effort to apply for these very competitive funding dollars. **Table 7** presents a possible combination to create more competitive super projects and seek non-local funding. These projects were bundled based on their relative location to one another.

Table 7 • Potential Project Combinations to Seek Non-Local Funding

| Super Projects | Individual Projects | Total Construction Cost |
|--|---|-------------------------|
| Improvements @ Mobberly Ave and Avalon Ave | <ul style="list-style-type: none"> – Mobberly Ave @ Level St – Green St @ Avalon Ave | \$ 361,470 |
| Improvements @ LeTourneau University | <ul style="list-style-type: none"> – Mobberly Ave @ N. Birdsong St – Mobberly Ave @ Main Post Office | \$ 559,730 |
| Improvements @ Fourth St and Loop 281 | <ul style="list-style-type: none"> – Fourth St @ Whataburger – Fourth St @ Clinic Dr – Fourth St @ Hollybrook Dr | \$ 637,990 |
| TOTAL COMBINED CONSTRUCTION COSTS | | \$ 1,559,190 |